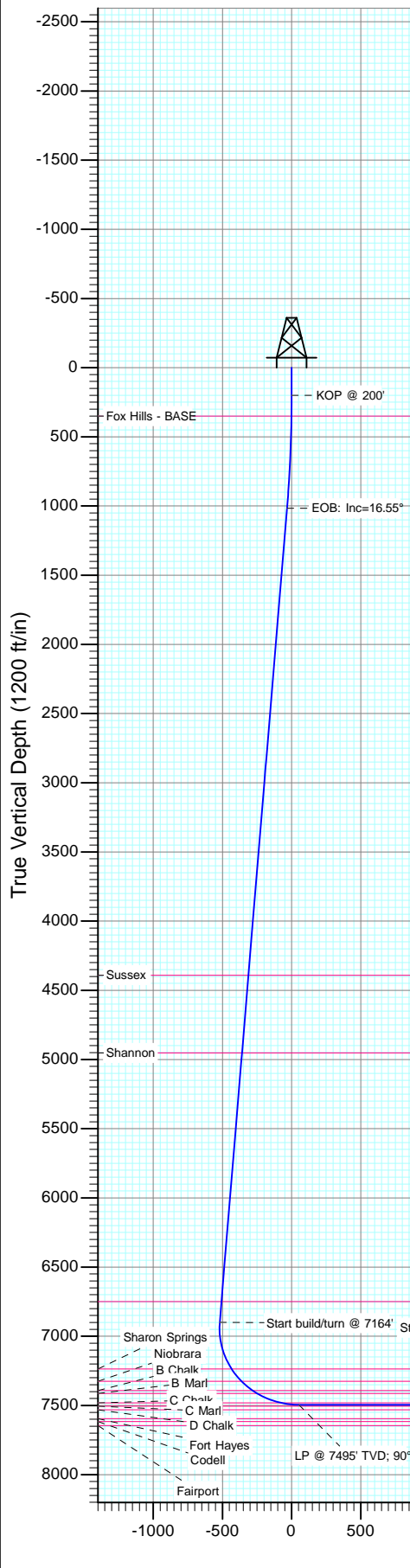
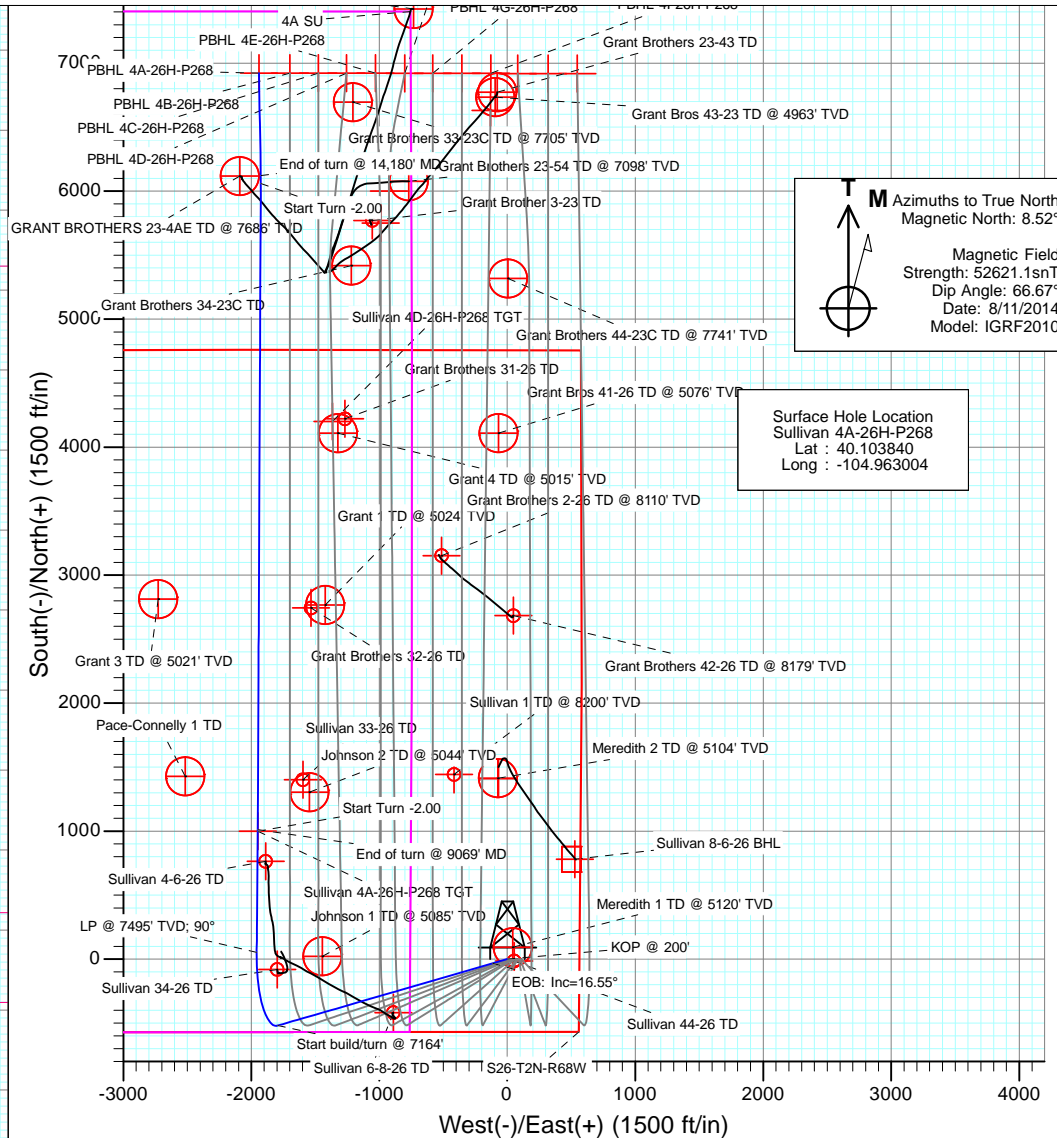




Project: DJ Wattenberg
Site: S26-T2N-R68W (Sullivan)
Well: Sullivan 4A-26H-P268
Wellbore: HZ
Design: Plan #2



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1027.6	16.55	253.85	1016.2	-33.0	-114.0	2.00	253.85	-33.0	
4	7164.7	16.55	253.85	6899.0	-519.5	-1793.4	0.00	0.00	-519.5	
5	8111.6	90.00	0.50	7495.0	53.0	-1958.2	10.00	106.00	53.0	
6	9058.6	90.00	0.50	7495.0	1000.0	-1949.9	0.00	0.00	1000.0	Sullivan 4A-26H-P268 TGT
7	9069.8	90.00	0.28	7495.0	1011.2	-1949.8	2.00	-90.00	1011.2	
8	14116.8	90.00	0.28	7495.0	6058.1	-1925.6	0.00	0.00	6058.1	
9	14180.5	90.00	359.00	7495.0	6121.9	-1926.0	2.00	-90.00	6121.9	
10	14980.5	90.00	359.00	7495.0	6921.8	-1939.9	0.00	0.00	6921.8	PBHL 4A-26H-P268

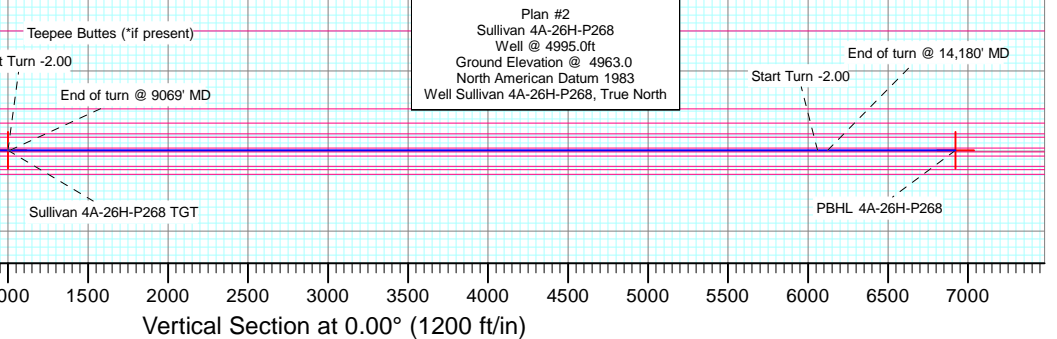


M Azimuths to True North
Magnetic North: 8.52°
Magnetic Field
Strength: 52621.1snT
Dip Angle: 66.67°
Date: 8/11/2014
Model: IGRF2010

Surface Hole Location
Sullivan 4A-26H-P268
Lat : 40.103840
Long : -104.963004

DESIGN TARGET DETAILS					
Name	+N/-S	+E/-W	Northing	Easting	Latitude
PBHL 4A-26H-P268	6921.8	-1939.9	1288040.50	3148235.86	40.122841
Sullivan 4A-26H-P268 TGT	1000.0	-1949.9	1282118.79	3148261.75	40.106585

Plan #2
Sullivan 4A-26H-P268
Well @ 4995.0ft
Ground Elevation @ 4963.0
North American Datum 1983
Well Sullivan 4A-26H-P268, True North



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	Well @ 4995.0ft
Project:	DJ Wattenberg	MD Reference:	Well @ 4995.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Project	DJ Wattenberg		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		S26-T2N-R68W (Sullivan)			
Site Position:		Northing:	1,282,631.01 ft	Latitude:	40.107960
From:	Lat/Long	Easting:	3,150,139.78 ft	Longitude:	-104.963250
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.35 °

Well	Sullivan 4A-26H-P268					
Well Position	+N/-S	0.0 ft	Northing:	1,281,130.62 ft	Latitude:	40.103840
	+E/-W	0.0 ft	Easting:	3,150,217.67 ft	Longitude:	-104.963004
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	4,963.0 ft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/11/2014	8.52	66.67	52,621

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	0.00

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,027.6	16.55	253.85	1,016.2	-33.0	-114.0	2.00	2.00	0.00	253.85	
7,164.7	16.55	253.85	6,899.0	-519.5	-1,793.4	0.00	0.00	0.00	0.00	
8,111.6	90.00	0.50	7,495.0	53.0	-1,958.2	10.00	7.76	11.26	106.00	
9,058.6	90.00	0.50	7,495.0	1,000.0	-1,949.9	0.00	0.00	0.00	0.00	Sullivan 4A-26H-P268
9,069.8	90.00	0.28	7,495.0	1,011.2	-1,949.8	2.00	0.00	-2.00	-90.00	
14,116.8	90.00	0.28	7,495.0	6,058.1	-1,925.6	0.00	0.00	0.00	0.00	
14,180.5	90.00	359.00	7,495.0	6,121.9	-1,926.0	2.00	0.00	-2.00	-90.00	
14,980.5	90.00	359.00	7,495.0	6,921.8	-1,939.9	0.00	0.00	0.00	0.00	PBHL 4A-26H-P268

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	Well @ 4995.0ft
Project:	DJ Wattenberg	MD Reference:	Well @ 4995.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200'
300.0	2.00	253.85	300.0	-0.5	-1.7	-0.5	2.00	2.00	
350.1	3.00	253.85	350.0	-1.1	-3.8	-1.1	2.00	2.00	Fox Hills - BASE
400.0	4.00	253.85	399.8	-1.9	-6.7	-1.9	2.00	2.00	
500.0	6.00	253.85	499.5	-4.4	-15.1	-4.4	2.00	2.00	
600.0	8.00	253.85	598.7	-7.8	-26.8	-7.8	2.00	2.00	
700.0	10.00	253.85	697.5	-12.1	-41.8	-12.1	2.00	2.00	
800.0	12.00	253.85	795.6	-17.4	-60.1	-17.4	2.00	2.00	
900.0	14.00	253.85	893.1	-23.7	-81.7	-23.7	2.00	2.00	
1,000.0	16.00	253.85	989.6	-30.9	-106.6	-30.9	2.00	2.00	
1,027.6	16.55	253.85	1,016.2	-33.0	-114.0	-33.0	2.00	2.00	EOB: Inc=16.55°
1,100.0	16.55	253.85	1,085.5	-38.8	-133.8	-38.8	0.00	0.00	
1,200.0	16.55	253.85	1,181.4	-46.7	-161.2	-46.7	0.00	0.00	
1,300.0	16.55	253.85	1,277.2	-54.6	-188.6	-54.6	0.00	0.00	
1,400.0	16.55	253.85	1,373.1	-62.5	-215.9	-62.5	0.00	0.00	
1,500.0	16.55	253.85	1,469.0	-70.5	-243.3	-70.5	0.00	0.00	
1,600.0	16.55	253.85	1,564.8	-78.4	-270.7	-78.4	0.00	0.00	
1,700.0	16.55	253.85	1,660.7	-86.3	-298.0	-86.3	0.00	0.00	
1,800.0	16.55	253.85	1,756.5	-94.2	-325.4	-94.2	0.00	0.00	
1,900.0	16.55	253.85	1,852.4	-102.2	-352.8	-102.2	0.00	0.00	
2,000.0	16.55	253.85	1,948.2	-110.1	-380.1	-110.1	0.00	0.00	
2,100.0	16.55	253.85	2,044.1	-118.0	-407.5	-118.0	0.00	0.00	
2,200.0	16.55	253.85	2,140.0	-126.0	-434.8	-126.0	0.00	0.00	
2,300.0	16.55	253.85	2,235.8	-133.9	-462.2	-133.9	0.00	0.00	
2,400.0	16.55	253.85	2,331.7	-141.8	-489.6	-141.8	0.00	0.00	
2,500.0	16.55	253.85	2,427.5	-149.7	-516.9	-149.7	0.00	0.00	
2,600.0	16.55	253.85	2,523.4	-157.7	-544.3	-157.7	0.00	0.00	
2,700.0	16.55	253.85	2,619.2	-165.6	-571.7	-165.6	0.00	0.00	
2,800.0	16.55	253.85	2,715.1	-173.5	-599.0	-173.5	0.00	0.00	
2,900.0	16.55	253.85	2,810.9	-181.4	-626.4	-181.4	0.00	0.00	
3,000.0	16.55	253.85	2,906.8	-189.4	-653.8	-189.4	0.00	0.00	
3,100.0	16.55	253.85	3,002.7	-197.3	-681.1	-197.3	0.00	0.00	
3,200.0	16.55	253.85	3,098.5	-205.2	-708.5	-205.2	0.00	0.00	
3,300.0	16.55	253.85	3,194.4	-213.1	-735.9	-213.1	0.00	0.00	
3,400.0	16.55	253.85	3,290.2	-221.1	-763.2	-221.1	0.00	0.00	
3,500.0	16.55	253.85	3,386.1	-229.0	-790.6	-229.0	0.00	0.00	
3,600.0	16.55	253.85	3,481.9	-236.9	-818.0	-236.9	0.00	0.00	
3,700.0	16.55	253.85	3,577.8	-244.8	-845.3	-244.8	0.00	0.00	
3,800.0	16.55	253.85	3,673.6	-252.8	-872.7	-252.8	0.00	0.00	
3,900.0	16.55	253.85	3,769.5	-260.7	-900.0	-260.7	0.00	0.00	
4,000.0	16.55	253.85	3,865.4	-268.6	-927.4	-268.6	0.00	0.00	
4,100.0	16.55	253.85	3,961.2	-276.6	-954.8	-276.6	0.00	0.00	
4,200.0	16.55	253.85	4,057.1	-284.5	-982.1	-284.5	0.00	0.00	
4,300.0	16.55	253.85	4,152.9	-292.4	-1,009.5	-292.4	0.00	0.00	
4,400.0	16.55	253.85	4,248.8	-300.3	-1,036.9	-300.3	0.00	0.00	
4,500.0	16.55	253.85	4,344.6	-308.3	-1,064.2	-308.3	0.00	0.00	
4,548.4	16.55	253.85	4,391.0	-312.1	-1,077.5	-312.1	0.00	0.00	Sussex
4,600.0	16.55	253.85	4,440.5	-316.2	-1,091.6	-316.2	0.00	0.00	
4,700.0	16.55	253.85	4,536.3	-324.1	-1,119.0	-324.1	0.00	0.00	
4,800.0	16.55	253.85	4,632.2	-332.0	-1,146.3	-332.0	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	Well @ 4995.0ft
Project:	DJ Wattenberg	MD Reference:	Well @ 4995.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,900.0	16.55	253.85	4,728.1	-340.0	-1,173.7	-340.0	0.00	0.00	
5,000.0	16.55	253.85	4,823.9	-347.9	-1,201.1	-347.9	0.00	0.00	
5,100.0	16.55	253.85	4,919.8	-355.8	-1,228.4	-355.8	0.00	0.00	
5,133.6	16.55	253.85	4,952.0	-358.5	-1,237.6	-358.5	0.00	0.00	Shannon
5,200.0	16.55	253.85	5,015.6	-363.7	-1,255.8	-363.7	0.00	0.00	
5,300.0	16.55	253.85	5,111.5	-371.7	-1,283.2	-371.7	0.00	0.00	
5,400.0	16.55	253.85	5,207.3	-379.6	-1,310.5	-379.6	0.00	0.00	
5,500.0	16.55	253.85	5,303.2	-387.5	-1,337.9	-387.5	0.00	0.00	
5,600.0	16.55	253.85	5,399.1	-395.4	-1,365.2	-395.4	0.00	0.00	
5,700.0	16.55	253.85	5,494.9	-403.4	-1,392.6	-403.4	0.00	0.00	
5,800.0	16.55	253.85	5,590.8	-411.3	-1,420.0	-411.3	0.00	0.00	
5,900.0	16.55	253.85	5,686.6	-419.2	-1,447.3	-419.2	0.00	0.00	
6,000.0	16.55	253.85	5,782.5	-427.1	-1,474.7	-427.1	0.00	0.00	
6,100.0	16.55	253.85	5,878.3	-435.1	-1,502.1	-435.1	0.00	0.00	
6,200.0	16.55	253.85	5,974.2	-443.0	-1,529.4	-443.0	0.00	0.00	
6,300.0	16.55	253.85	6,070.0	-450.9	-1,556.8	-450.9	0.00	0.00	
6,400.0	16.55	253.85	6,165.9	-458.9	-1,584.2	-458.9	0.00	0.00	
6,500.0	16.55	253.85	6,261.8	-466.8	-1,611.5	-466.8	0.00	0.00	
6,600.0	16.55	253.85	6,357.6	-474.7	-1,638.9	-474.7	0.00	0.00	
6,700.0	16.55	253.85	6,453.5	-482.6	-1,666.3	-482.6	0.00	0.00	
6,800.0	16.55	253.85	6,549.3	-490.6	-1,693.6	-490.6	0.00	0.00	
6,900.0	16.55	253.85	6,645.2	-498.5	-1,721.0	-498.5	0.00	0.00	
7,000.0	16.55	253.85	6,741.0	-506.4	-1,748.4	-506.4	0.00	0.00	
7,007.3	16.55	253.85	6,748.0	-507.0	-1,750.3	-507.0	0.00	0.00	Teepee Buttes (*if present)
7,100.0	16.55	253.85	6,836.9	-514.3	-1,775.7	-514.3	0.00	0.00	
7,164.7	16.55	253.85	6,899.0	-519.5	-1,793.4	-519.5	0.00	0.00	Start build/turn @ 7164'
7,200.0	15.94	266.28	6,932.8	-521.2	-1,803.1	-521.2	10.00	-1.75	
7,300.0	18.13	300.10	7,028.6	-514.2	-1,830.3	-514.2	10.00	2.20	
7,400.0	24.46	321.75	7,121.9	-490.1	-1,856.7	-490.1	10.00	6.33	
7,500.0	32.60	334.06	7,209.8	-449.5	-1,881.3	-449.5	10.00	8.14	
7,531.6	35.35	336.84	7,236.0	-433.5	-1,888.7	-433.5	10.00	8.71	Sharon Springs
7,600.0	41.49	341.72	7,289.6	-393.7	-1,903.6	-393.7	10.00	8.97	
7,647.6	45.86	344.46	7,324.0	-362.3	-1,913.1	-362.3	10.00	9.18	Niobrara
7,700.0	50.73	347.04	7,358.8	-324.4	-1,922.7	-324.4	10.00	9.30	
7,755.6	55.95	349.41	7,392.0	-280.8	-1,931.7	-280.8	10.00	9.40	B Chalk
7,795.0	59.68	350.92	7,413.0	-247.9	-1,937.4	-247.9	10.00	9.46	B Marl
7,800.0	60.16	351.10	7,415.5	-243.6	-1,938.1	-243.6	10.00	9.49	
7,900.0	69.69	354.45	7,457.9	-153.9	-1,949.4	-153.9	10.00	9.53	
7,982.2	77.56	356.90	7,481.0	-75.3	-1,955.3	-75.3	10.00	9.58	C Chalk
8,000.0	79.27	357.41	7,484.6	-57.9	-1,956.2	-57.9	10.00	9.60	
8,100.0	88.89	0.18	7,494.9	41.5	-1,958.2	41.5	10.00	9.61	
8,111.6	90.00	0.50	7,495.0	53.0	-1,958.2	53.0	10.00	9.62	LP @ 7495' TVD; 90°
8,200.0	90.00	0.50	7,495.0	141.5	-1,957.4	141.5	0.00	0.00	
8,300.0	90.00	0.50	7,495.0	241.4	-1,956.5	241.4	0.00	0.00	
8,400.0	90.00	0.50	7,495.0	341.4	-1,955.6	341.4	0.00	0.00	
8,500.0	90.00	0.50	7,495.0	441.4	-1,954.8	441.4	0.00	0.00	
8,600.0	90.00	0.50	7,495.0	541.4	-1,953.9	541.4	0.00	0.00	
8,700.0	90.00	0.50	7,495.0	641.4	-1,953.0	641.4	0.00	0.00	
8,800.0	90.00	0.50	7,495.0	741.4	-1,952.2	741.4	0.00	0.00	
8,900.0	90.00	0.50	7,495.0	841.4	-1,951.3	841.4	0.00	0.00	
9,000.0	90.00	0.50	7,495.0	941.4	-1,950.4	941.4	0.00	0.00	
9,058.6	90.00	0.50	7,495.0	1,000.0	-1,949.9	1,000.0	0.00	0.00	Start Turn -2.00 - Sullivan 4A-26H-P268 TGT

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	Well @ 4995.0ft
Project:	DJ Wattenberg	MD Reference:	Well @ 4995.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,069.8	90.00	0.28	7,495.0	1,011.2	-1,949.8	1,011.2	2.00	0.00	End of turn @ 9069' MD
9,100.0	90.00	0.28	7,495.0	1,041.4	-1,949.7	1,041.4	0.00	0.00	
9,200.0	90.00	0.28	7,495.0	1,141.4	-1,949.2	1,141.4	0.00	0.00	
9,300.0	90.00	0.28	7,495.0	1,241.4	-1,948.7	1,241.4	0.00	0.00	
9,400.0	90.00	0.28	7,495.0	1,341.4	-1,948.2	1,341.4	0.00	0.00	
9,500.0	90.00	0.28	7,495.0	1,441.4	-1,947.8	1,441.4	0.00	0.00	
9,600.0	90.00	0.28	7,495.0	1,541.4	-1,947.3	1,541.4	0.00	0.00	
9,700.0	90.00	0.28	7,495.0	1,641.4	-1,946.8	1,641.4	0.00	0.00	
9,800.0	90.00	0.28	7,495.0	1,741.4	-1,946.3	1,741.4	0.00	0.00	
9,900.0	90.00	0.28	7,495.0	1,841.4	-1,945.8	1,841.4	0.00	0.00	
10,000.0	90.00	0.28	7,495.0	1,941.4	-1,945.4	1,941.4	0.00	0.00	
10,100.0	90.00	0.28	7,495.0	2,041.4	-1,944.9	2,041.4	0.00	0.00	
10,200.0	90.00	0.28	7,495.0	2,141.4	-1,944.4	2,141.4	0.00	0.00	
10,300.0	90.00	0.28	7,495.0	2,241.4	-1,943.9	2,241.4	0.00	0.00	
10,400.0	90.00	0.28	7,495.0	2,341.4	-1,943.4	2,341.4	0.00	0.00	
10,500.0	90.00	0.28	7,495.0	2,441.4	-1,942.9	2,441.4	0.00	0.00	
10,600.0	90.00	0.28	7,495.0	2,541.4	-1,942.5	2,541.4	0.00	0.00	
10,700.0	90.00	0.28	7,495.0	2,641.4	-1,942.0	2,641.4	0.00	0.00	
10,800.0	90.00	0.28	7,495.0	2,741.4	-1,941.5	2,741.4	0.00	0.00	
10,900.0	90.00	0.28	7,495.0	2,841.4	-1,941.0	2,841.4	0.00	0.00	
11,000.0	90.00	0.28	7,495.0	2,941.4	-1,940.5	2,941.4	0.00	0.00	
11,100.0	90.00	0.28	7,495.0	3,041.4	-1,940.1	3,041.4	0.00	0.00	
11,200.0	90.00	0.28	7,495.0	3,141.4	-1,939.6	3,141.4	0.00	0.00	
11,300.0	90.00	0.28	7,495.0	3,241.4	-1,939.1	3,241.4	0.00	0.00	
11,400.0	90.00	0.28	7,495.0	3,341.4	-1,938.6	3,341.4	0.00	0.00	
11,500.0	90.00	0.28	7,495.0	3,441.4	-1,938.1	3,441.4	0.00	0.00	
11,600.0	90.00	0.28	7,495.0	3,541.4	-1,937.7	3,541.4	0.00	0.00	
11,700.0	90.00	0.28	7,495.0	3,641.4	-1,937.2	3,641.4	0.00	0.00	
11,800.0	90.00	0.28	7,495.0	3,741.4	-1,936.7	3,741.4	0.00	0.00	
11,900.0	90.00	0.28	7,495.0	3,841.4	-1,936.2	3,841.4	0.00	0.00	
12,000.0	90.00	0.28	7,495.0	3,941.4	-1,935.7	3,941.4	0.00	0.00	
12,100.0	90.00	0.28	7,495.0	4,041.4	-1,935.3	4,041.4	0.00	0.00	
12,200.0	90.00	0.28	7,495.0	4,141.4	-1,934.8	4,141.4	0.00	0.00	
12,300.0	90.00	0.28	7,495.0	4,241.4	-1,934.3	4,241.4	0.00	0.00	
12,400.0	90.00	0.28	7,495.0	4,341.4	-1,933.8	4,341.4	0.00	0.00	
12,500.0	90.00	0.28	7,495.0	4,441.4	-1,933.3	4,441.4	0.00	0.00	
12,600.0	90.00	0.28	7,495.0	4,541.4	-1,932.9	4,541.4	0.00	0.00	
12,700.0	90.00	0.28	7,495.0	4,641.4	-1,932.4	4,641.4	0.00	0.00	
12,800.0	90.00	0.28	7,495.0	4,741.4	-1,931.9	4,741.4	0.00	0.00	
12,900.0	90.00	0.28	7,495.0	4,841.4	-1,931.4	4,841.4	0.00	0.00	
13,000.0	90.00	0.28	7,495.0	4,941.4	-1,930.9	4,941.4	0.00	0.00	
13,100.0	90.00	0.28	7,495.0	5,041.4	-1,930.5	5,041.4	0.00	0.00	
13,200.0	90.00	0.28	7,495.0	5,141.4	-1,930.0	5,141.4	0.00	0.00	
13,300.0	90.00	0.28	7,495.0	5,241.4	-1,929.5	5,241.4	0.00	0.00	
13,400.0	90.00	0.28	7,495.0	5,341.4	-1,929.0	5,341.4	0.00	0.00	
13,500.0	90.00	0.28	7,495.0	5,441.4	-1,928.5	5,441.4	0.00	0.00	
13,600.0	90.00	0.28	7,495.0	5,541.4	-1,928.0	5,541.4	0.00	0.00	
13,700.0	90.00	0.28	7,495.0	5,641.4	-1,927.6	5,641.4	0.00	0.00	
13,800.0	90.00	0.28	7,495.0	5,741.4	-1,927.1	5,741.4	0.00	0.00	
13,900.0	90.00	0.28	7,495.0	5,841.4	-1,926.6	5,841.4	0.00	0.00	
14,000.0	90.00	0.28	7,495.0	5,941.4	-1,926.1	5,941.4	0.00	0.00	
14,100.0	90.00	0.28	7,495.0	6,041.4	-1,925.6	6,041.4	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	Well @ 4995.0ft
Project:	DJ Wattenberg	MD Reference:	Well @ 4995.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
14,116.8	90.00	0.28	7,495.0	6,058.1	-1,925.6	6,058.1	0.00	0.00	Start Turn -2.00
14,180.5	90.00	359.00	7,495.0	6,121.9	-1,926.0	6,121.9	2.00	0.00	End of turn @ 14,180' MD
14,200.0	90.00	359.00	7,495.0	6,141.4	-1,926.3	6,141.4	0.00	0.00	
14,300.0	90.00	359.00	7,495.0	6,241.3	-1,928.1	6,241.3	0.00	0.00	
14,400.0	90.00	359.00	7,495.0	6,341.3	-1,929.8	6,341.3	0.00	0.00	
14,500.0	90.00	359.00	7,495.0	6,441.3	-1,931.5	6,441.3	0.00	0.00	
14,600.0	90.00	359.00	7,495.0	6,541.3	-1,933.3	6,541.3	0.00	0.00	
14,700.0	90.00	359.00	7,495.0	6,641.3	-1,935.0	6,641.3	0.00	0.00	
14,800.0	90.00	359.00	7,495.0	6,741.3	-1,936.8	6,741.3	0.00	0.00	
14,900.0	90.00	359.00	7,495.0	6,841.2	-1,938.5	6,841.2	0.00	0.00	
14,980.5	90.00	359.00	7,495.0	6,921.8	-1,939.9	6,921.8	0.00	0.00	TD at 14980.5 - PBHL 4A-26H-P268

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Sullivan 4A-26H-P268 T - plan hits target center - Point	0.00	0.00	7,495.0	1,000.0	-1,949.9	1,282,118.79	3,148,261.75	40.106585	-104.969975
PBHL 4A-26H-P268 - plan hits target center - Point	0.00	0.00	7,495.0	6,921.8	-1,939.9	1,288,040.50	3,148,235.86	40.122841	-104.969941

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
350.1	350.0	Fox Hills - BASE			
4,548.4	4,391.0	Sussex			
5,133.6	4,952.0	Shannon			
7,007.3	6,748.0	Teepee Buttes (*if present)			
7,531.6	7,236.0	Sharon Springs			
7,647.6	7,324.0	Niobrara			
7,755.6	7,392.0	B Chalk			
7,795.0	7,413.0	B Marl			
7,982.2	7,481.0	C Chalk			

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	Well @ 4995.0ft
Project:	DJ Wattenberg	MD Reference:	Well @ 4995.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
1,027.6	1,016.2	-33.0	-114.0	EOB: Inc=16.55°
7,164.7	6,899.0	-519.5	-1,793.4	Start build/turn @ 7164'
8,111.6	7,495.0	53.0	-1,958.2	LP @ 7495' TVD; 90°
9,058.6	7,495.0	1,000.0	-1,949.9	Start Turn -2.00
9,069.8	7,495.0	1,011.2	-1,949.8	End of turn @ 9069' MD
14,116.8	7,495.0	6,058.1	-1,925.6	Start Turn -2.00
14,180.5	7,495.0	6,121.9	-1,926.0	End of turn @ 14,180' MD
14,980.5	7,495.0	6,921.8	-1,939.9	TD at 14980.5

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S26-T2N-R68W (Sullivan)

Sullivan 4A-26H-P268

HZ

Plan #2

Anticollision Report

17 September, 2014

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference	Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,257.3ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	9/17/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	14,980.3	Plan #2 (HZ)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S26-T2N-R68W (Sullivan)						
BERGER 32-23 (EXISTING) - SUNDANCE WELL - NO S						Out of range
BERGER 42-23C (EXISTING) - SUNDANCE WELL - NO						Out of range
GRANT 1 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
GRANT 3 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
GRANT 4 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
GRANT BROS 41-26 (EXISTING) - SUNDANCE WELL -						Out of range
GRANT BROS 43-23 (EXISTING) - SUNDANCE WELL -						Out of range
GRANT BROTHERS 2-26 (EXISTING) - ENCANA WELL						Out of range
GRANT BROTHERS 23-2Ae (EXISTING) - SUNDANCE						Out of range
GRANT BROTHERS 23-43 (EXISTING) - SUNDANCE W						Out of range
GRANT BROTHERS 23-4AE (EXISTING) - SUNDANCE	14,176.4	7,528.8	161.4	32.3	1.250	Level 3, CC, ES, SF
GRANT BROTHERS 23-54 (EXISTING) - SUNDANCE W	14,133.0	7,210.0	1,199.4	1,076.8	9.778	CC, ES
GRANT BROTHERS 23-54 (EXISTING) - SUNDANCE W	14,300.0	7,210.0	1,212.9	1,087.1	9.641	SF
GRANT BROTHERS 31-26 (EXISTING) - ENCANA WEL	12,282.7	7,425.0	665.5	575.6	7.402	CC
GRANT BROTHERS 31-26 (EXISTING) - ENCANA WEL	12,300.0	7,425.0	665.7	575.5	7.380	ES
GRANT BROTHERS 31-26 (EXISTING) - ENCANA WEL	12,400.0	7,425.0	675.7	583.8	7.350	SF
GRANT BROTHERS 32-26 (EXISTING) - ENCANA WEL	10,804.4	7,431.0	408.2	343.6	6.317	CC, ES, SF
GRANT BROTHERS 3-23 (EXISTING) - ENCANA WELL	13,840.7	7,429.5	869.0	758.6	7.869	CC, ES
GRANT BROTHERS 3-23 (EXISTING) - ENCANA WELL	14,000.0	7,426.8	883.5	770.3	7.805	SF
GRANT BROTHERS 33-23C (EXISTING) - SUNDANCE	14,740.8	7,411.0	728.9	595.6	5.469	CC, ES
GRANT BROTHERS 33-23C (EXISTING) - SUNDANCE	14,800.0	7,411.0	731.3	597.0	5.445	SF
GRANT BROTHERS 34-23C (EXISTING) - SUNDANCE	13,480.7	7,417.0	709.8	599.2	6.416	CC
GRANT BROTHERS 34-23C (EXISTING) - SUNDANCE	13,500.0	7,417.0	710.1	599.1	6.399	ES
GRANT BROTHERS 34-23C (EXISTING) - SUNDANCE	13,600.0	7,417.0	719.8	607.1	6.386	SF
GRANT BROTHERS 42-26 (EXISTING) - ENCANA WEL						Out of range
GRANT BROTHERS 44-23C (EXISTING) - SUNDANCE						Out of range
JOHNSON 1 (EXISTING) - KPK WELL - NO SURVEYS	5,343.3	5,085.0	424.5	389.4	12.101	CC, ES, SF
JOHNSON 2 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
MEREDITH 1 (EXISTING) - KPK WELL - NO SURVEYS	200.0	164.0	102.0	101.5	176.039	CC, ES
MEREDITH 1 (EXISTING) - KPK WELL - NO SURVEYS	900.0	857.1	170.2	167.0	53.506	SF
MEREDITH 2 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
PACE-CONNELLY 1 (EXISTING) - FOUNDATION WELL						Out of range
SULLIVAN 1 (EXISTING) - ENCANA WELL - NO SURVE						Out of range
SULLIVAN 33-26 (EXISTING) - ENCANA WELL - NO SU	9,461.7	7,439.0	350.5	307.9	8.226	CC, ES
SULLIVAN 33-26 (EXISTING) - ENCANA WELL - NO SU	9,500.0	7,439.0	352.6	309.4	8.162	SF
SULLIVAN 34-26 (EXISTING) - ENCANA WELL - SURVE	7,954.7	7,425.4	157.9	131.0	5.861	CC, ES, SF
SULLIVAN 44-26 (EXISTING) - ENCANA WELL - NO SU	200.0	166.0	55.2	54.6	94.674	CC, ES
SULLIVAN 44-26 (EXISTING) - ENCANA WELL - NO SU	600.0	564.7	80.2	78.3	40.239	SF
SULLIVAN 4-6-26 (EXISTING) - ENCANA WELL - SURV	8,813.7	7,526.3	64.2	25.6	1.664	CC, ES, SF
Sullivan 4B-26H-P268 - HZ - Plan #1	200.0	201.0	10.1	9.5	17.121	CC, ES
Sullivan 4B-26H-P268 - HZ - Plan #1	14,980.5	15,048.2	275.8	56.6	1.258	Level 3, SF
Sullivan 4C-26H-P268 - HZ - Plan #1	200.0	201.0	20.1	19.6	34.242	CC, ES
Sullivan 4C-26H-P268 - HZ - Plan #1	14,980.5	14,784.5	472.0	227.7	1.932	SF
Sullivan 4D-26H-P268 - HZ - Plan #1	200.0	201.0	29.9	29.3	50.888	CC, ES
Sullivan 4D-26H-P268 - HZ - Plan #1	14,200.0	14,004.6	594.7	374.0	2.695	SF
Sullivan 4E-26H-P268 - HZ - Plan #1	200.0	201.0	40.0	39.4	68.009	CC, ES
Sullivan 4E-26H-P268 - HZ - Plan #1	14,980.5	14,921.3	920.1	673.8	3.736	SF
Sullivan 4F-26H-P268 - HZ - Plan #1	200.0	201.0	50.1	49.5	85.132	CC, ES
Sullivan 4F-26H-P268 - HZ - Plan #1	14,500.0	14,100.0	1,032.9	803.7	4.507	SF
Sullivan 4G-26H-P268 - HZ - Plan #1	200.0	201.0	60.1	59.6	102.253	CC, ES
Sullivan 4G-26H-P268 - HZ - Plan #1	7,000.0	6,913.1	1,234.0	1,203.5	40.497	SF
Sullivan 4H-26H-P268 - HZ - Plan #1	200.0	202.0	69.9	69.3	118.546	CC, ES
Sullivan 4H-26H-P268 - HZ - Plan #1	700.0	699.5	112.3	110.0	48.285	SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
S26-T2N-R68W (Sullivan)						
Sullivan 4I-26H-P268 - HZ - Plan #1	200.0	202.0	80.0	79.4	135.616	CC, ES
Sullivan 4I-26H-P268 - HZ - Plan #1	5,600.0	5,483.0	1,240.4	1,216.6	52.161	SF
Sullivan 4J-26H-P268 - HZ - Plan #1	200.0	201.0	90.1	89.5	153.140	CC, ES
Sullivan 4J-26H-P268 - HZ - Plan #1	800.0	796.6	151.2	148.5	56.660	SF
Sullivan 4K-26H-P268 - HZ - Plan #1	200.0	201.0	100.1	99.6	170.261	CC, ES
Sullivan 4K-26H-P268 - HZ - Plan #1	800.0	796.6	161.2	158.5	60.375	SF
Sullivan 4L-26H-P268 - HZ - Plan #1	200.0	201.0	109.9	109.3	186.909	CC, ES
Sullivan 4L-26H-P268 - HZ - Plan #1	800.0	796.6	170.9	168.2	63.967	SF
SULLIVAN 6-8-26 (EXISTING) - ENCANA WELL - SURV	4,060.5	3,991.2	154.1	119.3	4.434	CC, ES, SF
SULLIVAN 8-6-26 (EXISTING) - ENCANA WELL - SURV						Out of range

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 23-4AE (EXISTING) - SUNDANCE WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 117-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
13,000.0	7,495.0	7,521.6	7,409.9	95.8	22.0	-86.77	6,115.7	-2,087.2	1,184.7	1,076.9	107.87	10.983		
13,100.0	7,495.0	7,522.2	7,410.5	97.4	22.0	-86.98	6,115.7	-2,087.2	1,085.8	976.2	109.62	9.905		
13,200.0	7,495.0	7,522.8	7,411.1	99.0	22.0	-87.20	6,115.7	-2,087.2	987.0	875.6	111.37	8.862		
13,300.0	7,495.0	7,523.4	7,411.7	100.6	22.0	-87.41	6,115.7	-2,087.3	888.5	775.4	113.12	7.855		
13,400.0	7,495.0	7,524.0	7,412.3	102.3	22.0	-87.62	6,115.7	-2,087.3	790.4	675.5	114.87	6.881		
13,500.0	7,495.0	7,524.6	7,412.9	103.9	22.0	-87.84	6,115.7	-2,087.3	692.8	576.2	116.61	5.941		
13,600.0	7,495.0	7,525.2	7,413.5	105.5	22.0	-88.05	6,115.8	-2,087.3	596.1	477.7	118.36	5.036		
13,700.0	7,495.0	7,525.9	7,414.1	107.2	22.0	-88.26	6,115.8	-2,087.3	500.6	380.5	120.11	4.168		
13,800.0	7,495.0	7,526.5	7,414.7	108.8	22.0	-88.48	6,115.8	-2,087.3	407.3	285.4	121.86	3.342		
13,900.0	7,495.0	7,527.1	7,415.3	110.5	22.0	-88.69	6,115.8	-2,087.3	318.0	194.4	123.60	2.573		
14,000.0	7,495.0	7,527.7	7,415.9	112.1	22.0	-88.91	6,115.8	-2,087.3	237.5	112.2	125.35	1.895		
14,100.0	7,495.0	7,528.3	7,416.5	113.8	22.0	-89.12	6,115.8	-2,087.3	178.0	50.9	127.09	1.401	Level 3	
14,176.4	7,495.0	7,528.8	7,417.0	115.1	22.0	-89.29	6,115.8	-2,087.3	161.4	32.3	129.12	1.250	Level 3, CC, ES, SF	
14,200.0	7,495.0	7,528.9	7,417.1	115.5	22.0	-89.34	6,115.8	-2,087.3	163.0	33.3	129.74	1.257	Level 3	
14,300.0	7,495.0	7,529.5	7,417.8	117.1	22.0	-89.57	6,115.8	-2,087.3	202.8	71.3	131.48	1.543		
14,400.0	7,495.0	7,530.2	7,418.4	118.8	22.0	-89.79	6,115.8	-2,087.3	275.1	141.9	133.22	2.065		
14,500.0	7,495.0	7,530.8	7,419.0	120.5	22.0	-90.02	6,115.8	-2,087.3	360.9	225.9	134.96	2.674		
14,600.0	7,495.0	7,531.5	7,419.7	122.2	22.0	-90.24	6,115.8	-2,087.4	452.5	315.8	136.70	3.310		
14,700.0	7,495.0	7,532.1	7,420.3	123.8	22.0	-90.47	6,115.8	-2,087.4	547.1	408.7	138.44	3.952		
14,800.0	7,495.0	7,532.7	7,421.0	125.5	22.0	-90.70	6,115.8	-2,087.4	643.3	503.2	140.17	4.590		
14,900.0	7,495.0	7,533.4	7,421.6	127.2	22.0	-90.92	6,115.8	-2,087.4	740.6	598.7	141.90	5.219		
14,980.5	7,495.0	7,533.9	7,422.1	128.6	22.0	-91.11	6,115.8	-2,087.4	819.3	676.0	143.30	5.718		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 23-54 (EXISTING) - SUNDANCE WELL - SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 118-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
13,800.0	7,495.0	7,210.0	7,098.0	108.8	21.2	74.42	6,077.2	-770.2	1,246.9	1,130.0	116.90	10.666	
13,900.0	7,495.0	7,210.0	7,098.0	110.5	21.2	74.42	6,077.2	-770.2	1,223.3	1,104.8	118.58	10.317	
14,000.0	7,495.0	7,210.0	7,098.0	112.1	21.2	74.42	6,077.2	-770.2	1,207.6	1,087.3	120.26	10.042	
14,100.0	7,495.0	7,210.0	7,098.0	113.8	21.2	74.42	6,077.2	-770.2	1,200.0	1,078.1	121.93	9.841	
14,133.0	7,495.0	7,210.0	7,098.0	114.3	21.2	74.42	6,077.2	-770.2	1,199.4	1,076.8	122.67	9.778 CC, ES	
14,200.0	7,495.0	7,210.0	7,098.0	115.5	21.2	74.42	6,077.2	-770.2	1,201.8	1,077.7	124.14	9.681	
14,300.0	7,495.0	7,210.0	7,098.0	117.1	21.2	74.42	6,077.2	-770.2	1,212.9	1,087.1	125.82	9.641 SF	
14,400.0	7,495.0	7,210.0	7,098.0	118.8	21.2	74.42	6,077.2	-770.2	1,232.1	1,104.6	127.49	9.664	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 31-26 (EXISTING) - ENCANA WELL - NO SURVEYS												Offset Site Error:	0.0 ft
Survey Program: 8118-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
11,300.0	7,495.0	7,425.0	7,425.0	69.3	13.0	90.00	4,220.9	-1,268.9	1,186.9	1,113.8	73.03	16.252	
11,400.0	7,495.0	7,425.0	7,425.0	70.8	13.0	90.00	4,220.9	-1,268.9	1,105.5	1,030.8	74.74	14.792	
11,500.0	7,495.0	7,425.0	7,425.0	72.3	13.0	90.00	4,220.9	-1,268.9	1,027.4	951.0	76.45	13.439	
11,600.0	7,495.0	7,425.0	7,425.0	73.8	13.0	90.00	4,220.9	-1,268.9	953.4	875.3	78.16	12.198	
11,700.0	7,495.0	7,425.0	7,425.0	75.3	13.0	90.00	4,220.9	-1,268.9	884.6	804.7	79.88	11.074	
11,800.0	7,495.0	7,425.0	7,425.0	76.8	13.0	90.00	4,220.9	-1,268.9	822.1	740.5	81.59	10.076	
11,900.0	7,495.0	7,425.0	7,425.0	78.4	13.0	90.00	4,220.9	-1,268.9	767.7	684.4	83.31	9.214	
12,000.0	7,495.0	7,425.0	7,425.0	79.9	13.0	90.00	4,220.9	-1,268.9	723.1	638.0	85.03	8.503	
12,100.0	7,495.0	7,425.0	7,425.0	81.5	13.0	90.00	4,220.9	-1,268.9	690.1	603.4	86.76	7.955	
12,200.0	7,495.0	7,425.0	7,425.0	83.0	13.0	90.00	4,220.9	-1,268.9	670.6	582.1	88.48	7.579	
12,282.7	7,495.0	7,425.0	7,425.0	84.3	13.0	90.00	4,220.9	-1,268.9	665.5	575.6	89.91	7.402 CC	
12,300.0	7,495.0	7,425.0	7,425.0	84.6	13.0	90.00	4,220.9	-1,268.9	665.7	575.5	90.21	7.380 ES	
12,400.0	7,495.0	7,425.0	7,425.0	86.2	13.0	90.00	4,220.9	-1,268.9	675.7	583.8	91.93	7.350 SF	
12,500.0	7,495.0	7,425.0	7,425.0	87.8	13.0	90.00	4,220.9	-1,268.9	700.0	606.4	93.66	7.474	
12,600.0	7,495.0	7,425.0	7,425.0	89.3	13.0	90.00	4,220.9	-1,268.9	737.2	641.8	95.39	7.729	
12,700.0	7,495.0	7,425.0	7,425.0	90.9	13.0	90.00	4,220.9	-1,268.9	785.5	688.3	97.12	8.088	
12,800.0	7,495.0	7,425.0	7,425.0	92.5	13.0	90.00	4,220.9	-1,268.9	842.9	744.0	98.85	8.527	
12,900.0	7,495.0	7,425.0	7,425.0	94.1	13.0	90.00	4,220.9	-1,268.9	907.7	807.1	100.58	9.024	
13,000.0	7,495.0	7,425.0	7,425.0	95.8	13.0	90.00	4,220.9	-1,268.9	978.4	876.1	102.32	9.563	
13,100.0	7,495.0	7,425.0	7,425.0	97.4	13.0	90.00	4,220.9	-1,268.9	1,053.9	949.9	104.05	10.129	
13,200.0	7,495.0	7,425.0	7,425.0	99.0	13.0	90.00	4,220.9	-1,268.9	1,133.2	1,027.4	105.78	10.713	
13,300.0	7,495.0	7,425.0	7,425.0	100.6	13.0	90.00	4,220.9	-1,268.9	1,215.6	1,108.1	107.52	11.306	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 32-26 (EXISTING) - ENCANA WELL - NO SURVEYS											Offset Site Error:		0.0 ft
Survey Program: 8140-Geolink MWD											Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,700.0	7,495.0	7,431.0	7,431.0	48.3	13.0	90.00	2,743.8	-1,533.3	1,177.4	1,131.0	46.35	25.403	
9,800.0	7,495.0	7,431.0	7,431.0	49.4	13.0	90.00	2,743.8	-1,533.3	1,084.1	1,036.2	47.95	22.608	
9,900.0	7,495.0	7,431.0	7,431.0	50.5	13.0	90.00	2,743.8	-1,533.3	992.2	942.6	49.57	20.015	
10,000.0	7,495.0	7,431.0	7,431.0	51.7	13.0	90.00	2,743.8	-1,533.3	902.0	850.8	51.20	17.616	
10,100.0	7,495.0	7,431.0	7,431.0	52.9	13.0	90.00	2,743.8	-1,533.3	814.1	761.2	52.84	15.405	
10,200.0	7,495.0	7,431.0	7,431.0	54.1	13.0	90.00	2,743.8	-1,533.3	729.3	674.8	54.50	13.383	
10,300.0	7,495.0	7,431.0	7,431.0	55.4	13.0	90.00	2,743.8	-1,533.3	648.8	592.7	56.15	11.555	
10,400.0	7,495.0	7,431.0	7,431.0	56.7	13.0	90.00	2,743.8	-1,533.3	574.6	516.7	57.82	9.937	
10,500.0	7,495.0	7,431.0	7,431.0	58.0	13.0	90.00	2,743.8	-1,533.3	509.2	449.7	59.49	8.559	
10,600.0	7,495.0	7,431.0	7,431.0	59.4	13.0	90.00	2,743.8	-1,533.3	456.5	395.3	61.17	7.463	
10,700.0	7,495.0	7,431.0	7,431.0	60.7	13.0	90.00	2,743.8	-1,533.3	421.3	358.5	62.85	6.703	
10,800.0	7,495.0	7,431.0	7,431.0	62.1	13.0	90.00	2,743.8	-1,533.3	408.2	343.7	64.54	6.325	
10,804.4	7,495.0	7,431.0	7,431.0	62.2	13.0	90.00	2,743.8	-1,533.3	408.2	343.6	64.62	6.317	CC, ES, SF
10,900.0	7,495.0	7,431.0	7,431.0	63.5	13.0	90.00	2,743.8	-1,533.3	419.2	353.0	66.23	6.330	
11,000.0	7,495.0	7,431.0	7,431.0	64.9	13.0	90.00	2,743.8	-1,533.3	452.7	384.7	67.93	6.664	
11,100.0	7,495.0	7,431.0	7,431.0	66.4	13.0	90.00	2,743.8	-1,533.3	504.0	434.4	69.63	7.238	
11,200.0	7,495.0	7,431.0	7,431.0	67.8	13.0	90.00	2,743.8	-1,533.3	568.5	497.1	71.33	7.969	
11,300.0	7,495.0	7,431.0	7,431.0	69.3	13.0	90.00	2,743.8	-1,533.3	642.1	569.1	73.04	8.791	
11,400.0	7,495.0	7,431.0	7,431.0	70.8	13.0	90.00	2,743.8	-1,533.3	722.1	647.3	74.75	9.660	
11,500.0	7,495.0	7,431.0	7,431.0	72.3	13.0	90.00	2,743.8	-1,533.3	806.6	730.1	76.46	10.549	
11,600.0	7,495.0	7,431.0	7,431.0	73.8	13.0	90.00	2,743.8	-1,533.3	894.2	816.1	78.17	11.439	
11,700.0	7,495.0	7,431.0	7,431.0	75.3	13.0	90.00	2,743.8	-1,533.3	984.3	904.4	79.89	12.321	
11,800.0	7,495.0	7,431.0	7,431.0	76.8	13.0	90.00	2,743.8	-1,533.3	1,076.1	994.5	81.61	13.186	
11,900.0	7,495.0	7,431.0	7,431.0	78.4	13.0	90.00	2,743.8	-1,533.3	1,169.2	1,085.9	83.32	14.032	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 3-23 (EXISTING) - ENCANA WELL - SURVEYS												Offset Site Error:	0.0 ft
Survey Program: 100-Gyro												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)					
13,000.0	7,495.0	7,444.2	7,441.8	95.8	6.5	90.45	5,777.6	-1,057.8	1,209.0	1,113.2	95.86	12.612	
13,100.0	7,495.0	7,442.4	7,440.1	97.4	6.5	90.33	5,777.7	-1,057.8	1,141.8	1,044.2	97.59	11.699	
13,200.0	7,495.0	7,440.6	7,438.3	99.0	6.5	90.22	5,777.7	-1,057.8	1,079.6	980.3	99.33	10.869	
13,300.0	7,495.0	7,438.9	7,436.5	100.6	6.5	90.10	5,777.7	-1,057.8	1,023.5	922.4	101.06	10.127	
13,400.0	7,495.0	7,437.1	7,434.8	102.3	6.5	89.99	5,777.7	-1,057.8	974.4	871.6	102.79	9.479	
13,500.0	7,495.0	7,435.4	7,433.0	103.9	6.5	89.87	5,777.8	-1,057.9	933.4	828.9	104.53	8.930	
13,600.0	7,495.0	7,433.6	7,431.3	105.5	6.5	89.76	5,777.8	-1,057.9	901.7	795.5	106.26	8.486	
13,700.0	7,495.0	7,431.9	7,429.6	107.2	6.5	89.64	5,777.8	-1,057.9	880.3	772.3	108.00	8.152	
13,800.0	7,495.0	7,430.2	7,427.8	108.8	6.5	89.53	5,777.9	-1,057.9	870.0	760.3	109.73	7.928	
13,840.7	7,495.0	7,429.5	7,427.1	109.5	6.5	89.48	5,777.9	-1,057.9	869.0	758.6	110.44	7.869 CC, ES	
13,900.0	7,495.0	7,428.5	7,426.1	110.5	6.5	89.41	5,777.9	-1,057.9	871.1	759.6	111.46	7.815	
14,000.0	7,495.0	7,426.8	7,424.4	112.1	6.5	89.30	5,777.9	-1,057.9	883.5	770.3	113.20	7.805 SF	
14,100.0	7,495.0	7,425.1	7,422.7	113.8	6.5	89.19	5,777.9	-1,057.9	906.9	792.0	114.93	7.891	
14,200.0	7,495.0	7,423.4	7,421.0	115.5	6.5	89.07	5,778.0	-1,058.0	941.4	824.0	117.39	8.020	
14,300.0	7,495.0	7,421.6	7,419.3	117.1	6.5	88.96	5,778.0	-1,058.0	985.9	866.8	119.12	8.276	
14,400.0	7,495.0	7,419.9	7,417.6	118.8	6.5	88.84	5,778.0	-1,058.0	1,038.1	917.2	120.86	8.589	
14,500.0	7,495.0	7,418.3	7,415.9	120.5	6.5	88.73	5,778.0	-1,058.0	1,097.0	974.4	122.59	8.948	
14,600.0	7,495.0	7,416.6	7,414.2	122.2	6.5	88.62	5,778.1	-1,058.0	1,161.5	1,037.1	124.33	9.342	
14,700.0	7,495.0	7,414.9	7,412.5	123.8	6.5	88.51	5,778.1	-1,058.0	1,230.7	1,104.7	126.06	9.763	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 33-23C (EXISTING) - SUNDANCE WELL - NO SURV													Offset Site Error: 0.0 ft
Survey Program: 8100-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
13,800.0	7,495.0	7,411.0	7,411.0	108.8	12.9	90.00	6,694.8	-1,207.0	1,194.8	1,078.6	116.18	10.284	
13,900.0	7,495.0	7,411.0	7,411.0	110.5	12.9	90.00	6,694.8	-1,207.0	1,116.3	998.4	117.92	9.467	
14,000.0	7,495.0	7,411.0	7,411.0	112.1	12.9	90.00	6,694.8	-1,207.0	1,041.5	921.9	119.66	8.704	
14,100.0	7,495.0	7,411.0	7,411.0	113.8	12.9	90.00	6,694.8	-1,207.0	971.3	849.9	121.40	8.001	
14,200.0	7,495.0	7,411.0	7,411.0	115.5	12.9	90.00	6,694.8	-1,207.0	907.6	783.7	123.86	7.328	
14,300.0	7,495.0	7,411.0	7,411.0	117.1	12.9	90.00	6,694.8	-1,207.0	851.8	726.2	125.60	6.782	
14,400.0	7,495.0	7,411.0	7,411.0	118.8	12.9	90.00	6,694.8	-1,207.0	804.6	677.3	127.34	6.319	
14,500.0	7,495.0	7,411.0	7,411.0	120.5	12.9	90.00	6,694.8	-1,207.0	767.6	638.5	129.08	5.947	
14,600.0	7,495.0	7,411.0	7,411.0	122.2	12.9	90.00	6,694.8	-1,207.0	742.3	611.5	130.82	5.674	
14,700.0	7,495.0	7,411.0	7,411.0	123.8	12.9	90.00	6,694.8	-1,207.0	730.0	597.5	132.56	5.507	
14,740.8	7,495.0	7,411.0	7,411.0	124.5	12.9	90.00	6,694.8	-1,207.0	728.9	595.6	133.27	5.469 CC, ES	
14,800.0	7,495.0	7,411.0	7,411.0	125.5	12.9	90.00	6,694.8	-1,207.0	731.3	597.0	134.31	5.445 SF	
14,900.0	7,495.0	7,411.0	7,411.0	127.2	12.9	90.00	6,694.8	-1,207.0	746.1	610.0	136.05	5.484	
14,980.5	7,495.0	7,411.0	7,411.0	128.6	12.9	90.00	6,694.8	-1,207.0	767.3	629.8	137.45	5.582	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 34-23C (EXISTING) - SUNDANCE WELL - NO SURV												Offset Site Error:	0.0 ft
Survey Program: 8090-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis		
12,500.0	7,495.0	7,417.0	7,417.0	87.8	12.9	90.00	5,418.7	-1,218.8	1,210.7	1,117.0	93.65	12.928	
12,600.0	7,495.0	7,417.0	7,417.0	89.3	12.9	90.00	5,418.7	-1,218.8	1,131.2	1,035.8	95.38	11.860	
12,700.0	7,495.0	7,417.0	7,417.0	90.9	12.9	90.00	5,418.7	-1,218.8	1,055.2	958.1	97.11	10.866	
12,800.0	7,495.0	7,417.0	7,417.0	92.5	12.9	90.00	5,418.7	-1,218.8	983.5	884.7	98.84	9.951	
12,900.0	7,495.0	7,417.0	7,417.0	94.1	12.9	90.00	5,418.7	-1,218.8	917.1	816.6	100.57	9.119	
13,000.0	7,495.0	7,417.0	7,417.0	95.8	12.9	90.00	5,418.7	-1,218.8	857.3	755.0	102.30	8.380	
13,100.0	7,495.0	7,417.0	7,417.0	97.4	12.9	90.00	5,418.7	-1,218.8	805.5	701.5	104.03	7.743	
13,200.0	7,495.0	7,417.0	7,417.0	99.0	12.9	90.00	5,418.7	-1,218.8	763.3	657.6	105.77	7.217	
13,300.0	7,495.0	7,417.0	7,417.0	100.6	12.9	90.00	5,418.7	-1,218.8	732.5	625.0	107.50	6.814	
13,400.0	7,495.0	7,417.0	7,417.0	102.3	12.9	90.00	5,418.7	-1,218.8	714.4	605.2	109.24	6.540	
13,480.7	7,495.0	7,417.0	7,417.0	103.6	12.9	90.00	5,418.7	-1,218.8	709.8	599.2	110.64	6.416 CC	
13,500.0	7,495.0	7,417.0	7,417.0	103.9	12.9	90.00	5,418.7	-1,218.8	710.1	599.1	110.98	6.399 ES	
13,600.0	7,495.0	7,417.0	7,417.0	105.5	12.9	90.00	5,418.7	-1,218.8	719.8	607.1	112.71	6.386 SF	
13,700.0	7,495.0	7,417.0	7,417.0	107.2	12.9	90.00	5,418.7	-1,218.8	742.9	628.5	114.45	6.491	
13,800.0	7,495.0	7,417.0	7,417.0	108.8	12.9	90.00	5,418.7	-1,218.8	778.3	662.2	116.19	6.699	
13,900.0	7,495.0	7,417.0	7,417.0	110.5	12.9	90.00	5,418.7	-1,218.8	824.4	706.5	117.93	6.991	
14,000.0	7,495.0	7,417.0	7,417.0	112.1	12.9	90.00	5,418.7	-1,218.8	879.5	759.8	119.67	7.350	
14,100.0	7,495.0	7,417.0	7,417.0	113.8	12.9	90.00	5,418.7	-1,218.8	942.0	820.6	121.41	7.759	
14,200.0	7,495.0	7,417.0	7,417.0	115.5	12.9	90.00	5,418.7	-1,218.8	1,011.4	887.5	123.87	8.165	
14,300.0	7,495.0	7,417.0	7,417.0	117.1	12.9	90.00	5,418.7	-1,218.8	1,086.2	960.6	125.61	8.648	
14,400.0	7,495.0	7,417.0	7,417.0	118.8	12.9	90.00	5,418.7	-1,218.8	1,164.8	1,037.5	127.35	9.147	
14,500.0	7,495.0	7,417.0	7,417.0	120.5	12.9	90.00	5,418.7	-1,218.8	1,246.5	1,117.4	129.09	9.656	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - JOHNSON 1 (EXISTING) - KPK WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 5085-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
1,400.0	1,373.1	1,315.1	1,315.1	4.9	2.3	20.88	21.9	-1,445.1	1,232.0	1,227.0	5.07	243.032		
1,500.0	1,469.0	1,411.0	1,411.0	5.4	2.5	21.36	21.9	-1,445.1	1,205.3	1,199.8	5.50	219.059		
1,600.0	1,564.8	1,506.8	1,506.8	6.0	2.6	21.86	21.9	-1,445.1	1,178.7	1,172.7	5.94	198.329		
1,700.0	1,660.7	1,602.7	1,602.7	6.5	2.8	22.38	21.9	-1,445.1	1,152.1	1,145.7	6.39	180.240		
1,800.0	1,756.5	1,698.5	1,698.5	7.0	3.0	22.93	21.9	-1,445.1	1,125.7	1,118.8	6.85	164.325		
1,900.0	1,852.4	1,794.4	1,794.4	7.6	3.1	23.51	21.9	-1,445.1	1,099.3	1,092.0	7.32	150.225		
2,000.0	1,948.2	1,890.2	1,890.2	8.1	3.3	24.11	21.9	-1,445.1	1,073.1	1,065.3	7.80	137.653		
2,100.0	2,044.1	1,986.1	1,986.1	8.7	3.5	24.74	21.9	-1,445.1	1,047.0	1,038.7	8.28	126.381		
2,200.0	2,140.0	2,082.0	2,082.0	9.2	3.6	25.41	21.9	-1,445.1	1,021.0	1,012.2	8.78	116.224		
2,300.0	2,235.8	2,177.8	2,177.8	9.8	3.8	26.11	21.9	-1,445.1	995.1	985.8	9.30	107.031		
2,400.0	2,331.7	2,273.7	2,273.7	10.3	4.0	26.84	21.9	-1,445.1	969.4	959.6	9.82	98.679		
2,500.0	2,427.5	2,369.5	2,369.5	10.8	4.1	27.61	21.9	-1,445.1	943.9	933.5	10.36	91.063		
2,600.0	2,523.4	2,465.4	2,465.4	11.4	4.3	28.43	21.9	-1,445.1	918.5	907.6	10.92	84.098		
2,700.0	2,619.2	2,561.2	2,561.2	11.9	4.5	29.29	21.9	-1,445.1	893.3	881.8	11.50	77.710		
2,800.0	2,715.1	2,657.1	2,657.1	12.5	4.6	30.20	21.9	-1,445.1	868.3	856.2	12.09	71.837		
2,900.0	2,810.9	2,752.9	2,752.9	13.0	4.8	31.16	21.9	-1,445.1	843.5	830.8	12.70	66.428		
3,000.0	2,906.8	2,848.8	2,848.8	13.5	5.0	32.18	21.9	-1,445.1	819.0	805.7	13.33	61.436		
3,100.0	3,002.7	2,944.7	2,944.7	14.1	5.1	33.27	21.9	-1,445.1	794.8	780.8	13.99	56.824		
3,200.0	3,098.5	3,040.5	3,040.5	14.6	5.3	34.41	21.9	-1,445.1	770.8	756.1	14.67	52.556		
3,300.0	3,194.4	3,136.4	3,136.4	15.2	5.5	35.63	21.9	-1,445.1	747.1	731.8	15.37	48.606		
3,400.0	3,290.2	3,232.2	3,232.2	15.7	5.6	36.92	21.9	-1,445.1	723.8	707.7	16.10	44.946		
3,500.0	3,386.1	3,328.1	3,328.1	16.3	5.8	38.30	21.9	-1,445.1	700.9	684.1	16.87	41.555		
3,600.0	3,481.9	3,423.9	3,423.9	16.8	6.0	39.77	21.9	-1,445.1	678.4	660.8	17.66	38.414		
3,700.0	3,577.8	3,519.8	3,519.8	17.4	6.1	41.33	21.9	-1,445.1	656.4	637.9	18.49	35.505		
3,800.0	3,673.6	3,615.6	3,615.6	17.9	6.3	43.00	21.9	-1,445.1	634.9	615.5	19.35	32.815		
3,900.0	3,769.5	3,711.5	3,711.5	18.4	6.5	44.77	21.9	-1,445.1	613.9	593.7	20.24	30.329		
4,000.0	3,865.4	3,807.4	3,807.4	19.0	6.6	46.67	21.9	-1,445.1	593.6	572.4	21.17	28.036		
4,100.0	3,961.2	3,903.2	3,903.2	19.5	6.8	48.69	21.9	-1,445.1	574.0	551.8	22.14	25.927		
4,200.0	4,057.1	3,999.1	3,999.1	20.1	7.0	50.84	21.9	-1,445.1	555.1	532.0	23.14	23.991		
4,300.0	4,152.9	4,094.9	4,094.9	20.6	7.1	53.14	21.9	-1,445.1	537.1	513.0	24.17	22.220		
4,400.0	4,248.8	4,190.8	4,190.8	21.2	7.3	55.58	21.9	-1,445.1	520.1	494.8	25.24	20.608		
4,500.0	4,344.6	4,286.6	4,286.6	21.7	7.5	58.17	21.9	-1,445.1	504.0	477.7	26.32	19.148		
4,600.0	4,440.5	4,382.5	4,382.5	22.2	7.6	60.92	21.9	-1,445.1	489.1	461.7	27.43	17.833		
4,700.0	4,536.3	4,478.3	4,478.3	22.8	7.8	63.82	21.9	-1,445.1	475.5	446.9	28.54	16.657		
4,800.0	4,632.2	4,574.2	4,574.2	23.3	8.0	66.88	21.9	-1,445.1	463.2	433.5	29.66	15.616		
4,900.0	4,728.1	4,670.1	4,670.1	23.9	8.2	70.07	21.9	-1,445.1	452.3	421.5	30.76	14.704		
5,000.0	4,823.9	4,765.9	4,765.9	24.4	8.3	73.41	21.9	-1,445.1	443.0	411.2	31.84	13.916		
5,100.0	4,919.8	4,861.8	4,861.8	25.0	8.5	76.86	21.9	-1,445.1	435.4	402.6	32.87	13.248		
5,200.0	5,015.6	4,957.6	4,957.6	25.5	8.7	80.42	21.9	-1,445.1	429.6	395.7	33.84	12.693		
5,300.0	5,111.5	5,053.5	5,053.5	26.1	8.8	84.05	21.9	-1,445.1	425.6	390.8	34.75	12.248		
5,343.3	5,153.0	5,085.0	5,085.0	26.3	8.9	85.25	21.9	-1,445.1	424.5	389.4	35.08	12.101	CC, ES, SF	
5,400.0	5,207.3	5,085.0	5,085.0	26.6	8.9	85.25	21.9	-1,445.1	428.3	392.9	35.39	12.102		
5,500.0	5,303.2	5,085.0	5,085.0	27.1	8.9	85.25	21.9	-1,445.1	452.5	416.6	35.93	12.594		
5,600.0	5,399.1	5,085.0	5,085.0	27.7	8.9	85.25	21.9	-1,445.1	496.1	459.6	36.47	13.601		
5,700.0	5,494.9	5,085.0	5,085.0	28.2	8.9	85.25	21.9	-1,445.1	554.5	517.5	37.02	14.979		
5,800.0	5,590.8	5,085.0	5,085.0	28.8	8.9	85.25	21.9	-1,445.1	623.5	586.0	37.56	16.601		
5,900.0	5,686.6	5,085.0	5,085.0	29.3	8.9	85.25	21.9	-1,445.1	700.1	662.0	38.10	18.374		
6,000.0	5,782.5	5,085.0	5,085.0	29.9	8.9	85.25	21.9	-1,445.1	782.0	743.3	38.64	20.235		
6,100.0	5,878.3	5,085.0	5,085.0	30.4	8.9	85.25	21.9	-1,445.1	867.6	828.4	39.19	22.141		
6,200.0	5,974.2	5,085.0	5,085.0	30.9	8.9	85.25	21.9	-1,445.1	956.1	916.4	39.73	24.066		
6,300.0	6,070.0	5,085.0	5,085.0	31.5	8.9	85.25	21.9	-1,445.1	1,046.6	1,006.4	40.27	25.990		
6,400.0	6,165.9	5,085.0	5,085.0	32.0	8.9	85.25	21.9	-1,445.1	1,138.8	1,098.0	40.81	27.902		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - JOHNSON 1 (EXISTING) - KPK WELL - NO SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 5085-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
6,500.0	6,261.8	5,085.0	5,085.0	32.6	8.9	85.25	21.9	-1,445.1	1,232.1	1,190.8	41.36	29.793	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - MEREDITH 1 (EXISTING) - KPK WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 5120-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	24.45	92.9	42.2	108.2					
100.0	100.0	64.0	64.0	0.1	0.1	24.45	92.9	42.2	102.0	101.8	0.23	442.533		
200.0	200.0	164.0	164.0	0.3	0.3	24.45	92.9	42.2	102.0	101.5	0.58	176.039 CC, ES		
300.0	300.0	264.0	264.0	0.5	0.5	131.32	92.9	42.2	103.2	102.3	0.93	110.860		
400.0	399.8	363.8	363.8	0.7	0.6	133.38	92.9	42.2	106.7	105.4	1.29	82.702		
500.0	499.5	463.5	463.5	0.9	0.8	136.51	92.9	42.2	112.9	111.2	1.66	67.937		
600.0	598.7	562.7	562.7	1.2	1.0	140.32	92.9	42.2	122.0	120.0	2.04	59.750		
700.0	697.5	661.5	661.5	1.5	1.2	144.41	92.9	42.2	134.5	132.1	2.43	55.420		
800.0	795.6	759.6	759.6	1.9	1.3	148.46	92.9	42.2	150.5	147.7	2.81	53.597		
900.0	893.1	857.1	857.1	2.3	1.5	152.21	92.9	42.2	170.2	167.0	3.18	53.506 SF		
1,000.0	989.6	953.6	953.6	2.8	1.7	155.57	92.9	42.2	193.6	190.0	3.54	54.655		
1,100.0	1,085.5	1,049.5	1,049.5	3.3	1.8	158.56	92.9	42.2	219.9	216.0	3.89	56.466		
1,200.0	1,181.4	1,145.4	1,145.4	3.8	2.0	160.96	92.9	42.2	246.7	242.5	4.24	58.194		
1,300.0	1,277.2	1,241.2	1,241.2	4.4	2.2	162.90	92.9	42.2	273.9	269.3	4.58	59.801		
1,400.0	1,373.1	1,337.1	1,337.1	4.9	2.3	164.49	92.9	42.2	301.3	296.4	4.92	61.276		
1,500.0	1,469.0	1,433.0	1,433.0	5.4	2.5	165.81	92.9	42.2	329.0	323.7	5.25	62.621		
1,600.0	1,564.8	1,528.8	1,528.8	6.0	2.7	166.93	92.9	42.2	356.7	351.1	5.59	63.845		
1,700.0	1,660.7	1,624.7	1,624.7	6.5	2.8	167.89	92.9	42.2	384.6	378.7	5.92	64.957		
1,800.0	1,756.5	1,720.5	1,720.5	7.0	3.0	168.72	92.9	42.2	412.5	406.3	6.25	65.968		
1,900.0	1,852.4	1,816.4	1,816.4	7.6	3.2	169.44	92.9	42.2	440.5	433.9	6.59	66.890		
2,000.0	1,948.2	1,912.2	1,912.2	8.1	3.3	170.08	92.9	42.2	468.6	461.7	6.92	67.732		
2,100.0	2,044.1	2,008.1	2,008.1	8.7	3.5	170.65	92.9	42.2	496.7	489.5	7.25	68.502		
2,200.0	2,140.0	2,104.0	2,104.0	9.2	3.7	171.15	92.9	42.2	524.9	517.3	7.58	69.209		
2,300.0	2,235.8	2,199.8	2,199.8	9.8	3.8	171.61	92.9	42.2	553.1	545.2	7.92	69.859		
2,400.0	2,331.7	2,295.7	2,295.7	10.3	4.0	172.01	92.9	42.2	581.3	573.0	8.25	70.458		
2,500.0	2,427.5	2,391.5	2,391.5	10.8	4.2	172.39	92.9	42.2	609.5	601.0	8.58	71.012		
2,600.0	2,523.4	2,487.4	2,487.4	11.4	4.3	172.73	92.9	42.2	637.8	628.9	8.92	71.525		
2,700.0	2,619.2	2,583.2	2,583.2	11.9	4.5	173.04	92.9	42.2	666.1	656.9	9.25	72.002		
2,800.0	2,715.1	2,679.1	2,679.1	12.5	4.7	173.32	92.9	42.2	694.4	684.8	9.59	72.445		
2,900.0	2,810.9	2,774.9	2,774.9	13.0	4.8	173.58	92.9	42.2	722.7	712.8	9.92	72.858		
3,000.0	2,906.8	2,870.8	2,870.8	13.5	5.0	173.83	92.9	42.2	751.1	740.8	10.25	73.245		
3,100.0	3,002.7	2,966.7	2,966.7	14.1	5.2	174.05	92.9	42.2	779.4	768.8	10.59	73.606		
3,200.0	3,098.5	3,062.5	3,062.5	14.6	5.3	174.26	92.9	42.2	807.8	796.8	10.92	73.945		
3,300.0	3,194.4	3,158.4	3,158.4	15.2	5.5	174.46	92.9	42.2	836.1	824.9	11.26	74.264		
3,400.0	3,290.2	3,254.2	3,254.2	15.7	5.7	174.64	92.9	42.2	864.5	852.9	11.59	74.563		
3,500.0	3,386.1	3,350.1	3,350.1	16.3	5.8	174.81	92.9	42.2	892.9	880.9	11.93	74.846		
3,600.0	3,481.9	3,445.9	3,445.9	16.8	6.0	174.97	92.9	42.2	921.3	909.0	12.26	75.113		
3,700.0	3,577.8	3,541.8	3,541.8	17.4	6.2	175.12	92.9	42.2	949.6	937.0	12.60	75.365		
3,800.0	3,673.6	3,637.6	3,637.6	17.9	6.3	175.26	92.9	42.2	978.0	965.1	12.94	75.604		
3,900.0	3,769.5	3,733.5	3,733.5	18.4	6.5	175.40	92.9	42.2	1,006.4	993.2	13.27	75.830		
4,000.0	3,865.4	3,829.4	3,829.4	19.0	6.7	175.52	92.9	42.2	1,034.8	1,021.2	13.61	76.045		
4,100.0	3,961.2	3,925.2	3,925.2	19.5	6.9	175.64	92.9	42.2	1,063.3	1,049.3	13.94	76.249		
4,200.0	4,057.1	4,021.1	4,021.1	20.1	7.0	175.76	92.9	42.2	1,091.7	1,077.4	14.28	76.443		
4,300.0	4,152.9	4,116.9	4,116.9	20.6	7.2	175.86	92.9	42.2	1,120.1	1,105.5	14.62	76.628		
4,400.0	4,248.8	4,212.8	4,212.8	21.2	7.4	175.97	92.9	42.2	1,148.5	1,133.6	14.95	76.805		
4,500.0	4,344.6	4,308.6	4,308.6	21.7	7.5	176.06	92.9	42.2	1,176.9	1,161.7	15.29	76.973		
4,600.0	4,440.5	4,404.5	4,404.5	22.2	7.7	176.16	92.9	42.2	1,205.4	1,189.7	15.63	77.134		
4,700.0	4,536.3	4,500.3	4,500.3	22.8	7.9	176.24	92.9	42.2	1,233.8	1,217.8	15.96	77.288		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 33-26 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8170-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,300.0	7,495.0	7,439.0	7,439.0	38.5	13.0	90.00	1,401.4	-1,597.4	1,214.3	1,186.4	27.92	43.498		
8,400.0	7,495.0	7,439.0	7,439.0	38.8	13.0	90.00	1,401.4	-1,597.4	1,118.9	1,090.2	28.67	39.026		
8,500.0	7,495.0	7,439.0	7,439.0	39.1	13.0	90.00	1,401.4	-1,597.4	1,024.3	994.8	29.58	34.633		
8,600.0	7,495.0	7,439.0	7,439.0	39.5	13.0	90.00	1,401.4	-1,597.4	930.9	900.3	30.61	30.412		
8,700.0	7,495.0	7,439.0	7,439.0	40.0	13.0	90.00	1,401.4	-1,597.4	839.1	807.3	31.75	26.425		
8,800.0	7,495.0	7,439.0	7,439.0	40.6	13.0	90.00	1,401.4	-1,597.4	749.3	716.3	32.98	22.717		
8,900.0	7,495.0	7,439.0	7,439.0	41.2	13.0	90.00	1,401.4	-1,597.4	662.4	628.1	34.29	19.319		
9,000.0	7,495.0	7,439.0	7,439.0	41.9	13.0	90.00	1,401.4	-1,597.4	579.8	544.2	35.65	16.263		
9,100.0	7,495.0	7,439.0	7,439.0	42.6	13.0	90.00	1,401.4	-1,597.4	503.7	466.5	37.17	13.550		
9,200.0	7,495.0	7,439.0	7,439.0	43.5	13.0	90.00	1,401.4	-1,597.4	437.4	398.8	38.63	11.323		
9,300.0	7,495.0	7,439.0	7,439.0	44.3	13.0	90.00	1,401.4	-1,597.4	386.0	345.9	40.13	9.620		
9,400.0	7,495.0	7,439.0	7,439.0	45.2	13.0	90.00	1,401.4	-1,597.4	355.9	314.2	41.65	8.545		
9,461.7	7,495.0	7,439.0	7,439.0	45.8	13.0	90.00	1,401.4	-1,597.4	350.5	307.9	42.61	8.226 CC, ES		
9,500.0	7,495.0	7,439.0	7,439.0	46.2	13.0	90.00	1,401.4	-1,597.4	352.6	309.4	43.20	8.162 SF		
9,600.0	7,495.0	7,439.0	7,439.0	47.2	13.0	90.00	1,401.4	-1,597.4	376.8	332.0	44.77	8.416		
9,700.0	7,495.0	7,439.0	7,439.0	48.3	13.0	90.00	1,401.4	-1,597.4	423.8	377.5	46.36	9.142		
9,800.0	7,495.0	7,439.0	7,439.0	49.4	13.0	90.00	1,401.4	-1,597.4	487.1	439.2	47.97	10.156		
9,900.0	7,495.0	7,439.0	7,439.0	50.5	13.0	90.00	1,401.4	-1,597.4	561.2	511.6	49.59	11.318		
10,000.0	7,495.0	7,439.0	7,439.0	51.7	13.0	90.00	1,401.4	-1,597.4	642.4	591.1	51.22	12.542		
10,100.0	7,495.0	7,439.0	7,439.0	52.9	13.0	90.00	1,401.4	-1,597.4	728.2	675.3	52.86	13.776		
10,200.0	7,495.0	7,439.0	7,439.0	54.1	13.0	90.00	1,401.4	-1,597.4	817.3	762.8	54.51	14.993		
10,300.0	7,495.0	7,439.0	7,439.0	55.4	13.0	90.00	1,401.4	-1,597.4	908.6	852.5	56.17	16.177		
10,400.0	7,495.0	7,439.0	7,439.0	56.7	13.0	90.00	1,401.4	-1,597.4	1,001.6	943.8	57.83	17.319		
10,500.0	7,495.0	7,439.0	7,439.0	58.0	13.0	90.00	1,401.4	-1,597.4	1,095.9	1,036.4	59.51	18.416		
10,600.0	7,495.0	7,439.0	7,439.0	59.4	13.0	90.00	1,401.4	-1,597.4	1,191.0	1,129.9	61.18	19.466		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 34-26 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
2,400.0	2,331.7	2,272.8	2,266.9	10.3	4.8	19.55	-84.2	-1,720.0	1,231.8	1,222.1	9.74	126.514		
2,500.0	2,427.5	2,370.1	2,364.1	10.8	5.0	19.79	-88.7	-1,720.8	1,205.4	1,195.2	10.18	118.386		
2,600.0	2,523.4	2,458.3	2,452.2	11.4	5.1	20.03	-92.3	-1,721.6	1,179.2	1,168.6	10.61	111.132		
2,700.0	2,619.2	2,545.5	2,539.3	11.9	5.3	20.31	-95.3	-1,723.2	1,153.9	1,142.9	11.04	104.519		
2,800.0	2,715.1	2,637.7	2,631.5	12.5	5.4	20.64	-97.9	-1,725.5	1,129.3	1,117.8	11.49	98.324		
2,900.0	2,810.9	2,733.4	2,727.1	13.0	5.6	21.03	-100.1	-1,727.9	1,104.8	1,092.9	11.94	92.494		
3,000.0	2,906.8	2,828.7	2,822.4	13.5	5.7	21.45	-102.0	-1,730.4	1,080.6	1,068.1	12.41	87.066		
3,100.0	3,002.7	2,926.2	2,919.8	14.1	5.9	21.93	-103.4	-1,733.0	1,056.4	1,043.5	12.89	81.953		
3,200.0	3,098.5	3,024.0	3,017.6	14.6	6.0	22.45	-104.5	-1,735.4	1,032.1	1,018.7	13.38	77.122		
3,300.0	3,194.4	3,117.0	3,110.5	15.2	6.2	22.97	-105.5	-1,737.8	1,008.1	994.2	13.88	72.654		
3,400.0	3,290.2	3,211.8	3,205.3	15.7	6.3	23.55	-106.1	-1,740.6	984.5	970.1	14.38	68.441		
3,500.0	3,386.1	3,309.9	3,303.4	16.3	6.5	24.19	-106.6	-1,743.3	960.9	946.0	14.92	64.413		
3,600.0	3,481.9	3,403.0	3,396.4	16.8	6.6	24.82	-107.0	-1,746.0	937.6	922.1	15.45	60.675		
3,700.0	3,577.8	3,499.0	3,492.4	17.4	6.8	25.51	-107.4	-1,749.1	914.6	898.6	16.01	57.121		
3,800.0	3,673.6	3,595.8	3,589.1	17.9	6.9	26.23	-107.9	-1,752.2	891.8	875.2	16.59	53.755		
3,900.0	3,769.5	3,696.7	3,690.0	18.4	7.1	27.02	-108.5	-1,755.2	868.9	851.7	17.20	50.520		
4,000.0	3,865.4	3,798.9	3,792.1	19.0	7.3	27.85	-109.4	-1,757.7	845.6	827.8	17.83	47.421		
4,100.0	3,961.2	3,893.3	3,886.5	19.5	7.4	28.68	-110.0	-1,759.8	822.3	803.8	18.46	44.542		
4,200.0	4,057.1	3,988.8	3,982.0	20.1	7.6	29.60	-110.1	-1,762.0	799.3	780.2	19.12	41.804		
4,300.0	4,152.9	4,081.3	4,074.5	20.6	7.7	30.55	-110.0	-1,764.3	776.8	757.1	19.80	39.244		
4,400.0	4,248.8	4,175.4	4,168.5	21.2	7.9	31.59	-109.7	-1,767.1	755.1	734.6	20.50	36.828		
4,500.0	4,344.6	4,271.9	4,265.0	21.7	8.0	32.71	-109.3	-1,770.1	733.7	712.5	21.25	34.524		
4,600.0	4,440.5	4,368.9	4,361.9	22.2	8.2	33.90	-109.0	-1,773.1	712.6	690.6	22.03	32.342		
4,700.0	4,536.3	4,466.3	4,459.3	22.8	8.3	35.15	-108.8	-1,776.1	691.8	668.9	22.85	30.281		
4,800.0	4,632.2	4,562.9	4,555.9	23.3	8.5	36.50	-108.3	-1,778.8	671.2	647.5	23.70	28.324		
4,900.0	4,728.1	4,658.6	4,651.5	23.9	8.6	37.91	-107.9	-1,781.7	651.1	626.5	24.58	26.493		
5,000.0	4,823.9	4,761.0	4,753.8	24.4	8.8	39.51	-107.4	-1,784.6	631.2	605.7	25.53	24.724		
5,100.0	4,919.8	4,865.5	4,858.4	25.0	9.0	41.31	-107.2	-1,786.0	610.5	583.9	26.55	22.992		
5,200.0	5,015.6	4,966.0	4,958.9	25.5	9.1	43.19	-107.1	-1,786.2	589.3	561.7	27.60	21.350		
5,300.0	5,111.5	5,062.6	5,055.4	26.1	9.3	45.12	-107.2	-1,786.1	568.2	539.6	28.67	19.821		
5,400.0	5,207.3	5,157.7	5,150.6	26.6	9.5	47.16	-107.3	-1,786.0	548.0	518.2	29.77	18.405		
5,500.0	5,303.2	5,256.4	5,249.2	27.1	9.6	49.37	-108.0	-1,786.2	528.4	497.4	30.93	17.081		
5,600.0	5,399.1	5,354.7	5,347.5	27.7	9.8	51.67	-109.5	-1,786.1	508.9	476.7	32.12	15.843		
5,700.0	5,494.9	5,447.6	5,440.5	28.2	10.0	54.07	-110.5	-1,785.8	490.3	456.9	33.31	14.718		
5,800.0	5,590.8	5,540.4	5,533.2	28.8	10.1	56.69	-110.6	-1,785.7	473.5	439.0	34.55	13.706		
5,900.0	5,686.6	5,637.1	5,630.0	29.3	10.3	59.53	-111.0	-1,786.2	458.1	422.2	35.83	12.785		
6,000.0	5,782.5	5,734.7	5,727.5	29.9	10.4	62.56	-111.7	-1,786.5	443.6	406.4	37.12	11.948		
6,100.0	5,878.3	5,831.2	5,824.0	30.4	10.6	65.85	-112.0	-1,786.0	430.1	391.7	38.42	11.194		
6,200.0	5,974.2	5,924.9	5,917.7	30.9	10.8	69.18	-112.5	-1,785.9	418.3	378.7	39.67	10.546		
6,300.0	6,070.0	6,017.8	6,010.6	31.5	10.9	72.54	-112.8	-1,786.8	409.0	368.1	40.86	10.009		
6,400.0	6,165.9	6,114.3	6,107.1	32.0	11.1	76.14	-113.0	-1,788.0	401.4	359.4	42.01	9.555		
6,500.0	6,261.8	6,206.6	6,199.4	32.6	11.2	79.74	-112.7	-1,789.0	396.2	353.1	43.06	9.199		
6,600.0	6,357.6	6,300.0	6,292.8	33.1	11.4	83.49	-111.4	-1,790.2	393.7	349.6	44.02	8.942		
6,655.4	6,410.8	6,352.4	6,345.2	33.4	11.5	85.63	-110.4	-1,790.8	393.4	348.8	44.51	8.837		
6,700.0	6,453.5	6,395.2	6,388.0	33.7	11.5	87.38	-109.5	-1,791.2	393.6	348.7	44.88	8.770		
6,800.0	6,549.3	6,490.9	6,483.7	34.2	11.7	91.31	-107.6	-1,792.0	395.5	349.9	45.59	8.674		
6,900.0	6,645.2	6,586.3	6,579.0	34.8	11.8	95.21	-105.6	-1,792.6	399.5	353.3	46.17	8.653		
7,000.0	6,741.0	6,683.1	6,675.7	35.3	12.0	99.12	-103.4	-1,792.9	405.5	358.9	46.60	8.702		
7,100.0	6,836.9	6,781.1	6,773.8	35.8	12.2	102.97	-101.7	-1,793.0	413.0	366.2	46.89	8.809		
7,200.0	6,932.8	6,877.2	6,869.8	36.4	12.3	94.63	-100.4	-1,793.3	421.0	374.0	47.01	8.955		
7,300.0	7,028.6	6,972.9	6,965.5	36.8	12.5	65.80	-99.0	-1,793.7	417.0	370.8	46.13	9.039		
7,400.0	7,121.9	7,066.1	7,058.7	37.2	12.6	49.69	-97.5	-1,794.0	397.7	353.7	43.94	9.050		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 34-26 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
7,500.0	7,209.8	7,155.7	7,148.3	37.5	12.8	44.29	-96.0	-1,794.7	364.0	323.5	40.46	8.996		
7,600.0	7,289.6	7,236.1	7,228.7	37.7	12.9	46.00	-94.9	-1,795.4	317.8	281.9	35.88	8.858		
7,700.0	7,358.8	7,304.8	7,297.4	37.8	13.0	53.96	-93.7	-1,795.7	263.4	232.6	30.80	8.551		
7,800.0	7,415.5	7,363.5	7,356.1	37.9	13.1	68.25	-92.5	-1,795.8	207.6	180.5	27.06	7.671		
7,900.0	7,457.9	7,407.9	7,400.5	38.0	13.2	83.99	-91.7	-1,796.0	165.5	138.9	26.59	6.224		
7,954.7	7,474.5	7,425.4	7,418.0	38.0	13.2	90.20	-91.3	-1,796.1	157.9	131.0	26.95	5.861	CC, ES, SF	
8,000.0	7,484.6	7,436.3	7,428.9	38.1	13.2	93.17	-91.1	-1,796.2	163.4	136.4	27.09	6.033		
8,100.0	7,494.9	7,448.2	7,440.8	38.2	13.3	91.92	-90.9	-1,796.2	209.3	182.0	27.30	7.665		
8,200.0	7,495.0	7,450.0	7,442.5	38.3	13.3	91.59	-90.9	-1,796.2	282.8	255.2	27.67	10.222		
8,300.0	7,495.0	7,451.6	7,444.2	38.5	13.3	92.16	-90.9	-1,796.2	369.0	340.8	28.26	13.057		
8,400.0	7,495.0	7,453.2	7,445.8	38.8	13.3	92.73	-90.8	-1,796.2	460.8	431.8	29.03	15.875		
8,500.0	7,495.0	7,454.8	7,447.4	39.1	13.3	93.30	-90.8	-1,796.2	555.5	525.5	29.94	18.552		
8,600.0	7,495.0	7,456.4	7,449.0	39.5	13.3	93.85	-90.8	-1,796.2	651.7	620.7	30.98	21.039		
8,700.0	7,495.0	7,458.0	7,450.6	40.0	13.3	94.40	-90.8	-1,796.2	748.9	716.8	32.11	23.321		
8,800.0	7,495.0	7,459.6	7,452.1	40.6	13.3	94.95	-90.7	-1,796.2	846.8	813.4	33.33	25.404		
8,900.0	7,495.0	7,461.1	7,453.7	41.2	13.3	95.48	-90.7	-1,796.2	945.1	910.5	34.62	27.299		
9,000.0	7,495.0	7,462.6	7,455.2	41.9	13.3	96.01	-90.7	-1,796.3	1,043.7	1,007.7	35.96	29.023		
9,100.0	7,495.0	7,464.1	7,456.7	42.6	13.3	96.71	-90.7	-1,796.3	1,142.6	1,105.1	37.44	30.516		
9,200.0	7,495.0	7,465.6	7,458.2	43.5	13.3	97.25	-90.6	-1,796.3	1,241.7	1,202.8	38.87	31.948		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 44-26 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8192-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	105.70	-14.9	53.1	64.8					
100.0	100.0	66.0	66.0	0.1	0.1	105.70	-14.9	53.1	55.2	55.0	0.23	235.859		
200.0	200.0	166.0	166.0	0.3	0.3	105.70	-14.9	53.1	55.2	54.6	0.58	94.674 CC, ES		
300.0	300.0	266.0	266.0	0.5	0.5	-149.06	-14.9	53.1	56.7	55.8	0.93	60.771		
400.0	399.8	365.8	365.8	0.7	0.6	-151.54	-14.9	53.1	61.2	60.0	1.29	47.640		
500.0	499.5	465.5	465.5	0.9	0.8	-154.92	-14.9	53.1	69.0	67.4	1.64	42.084		
600.0	598.7	564.7	564.7	1.2	1.0	-158.52	-14.9	53.1	80.2	78.3	1.99	40.239 SF		
700.0	697.5	663.5	663.5	1.5	1.2	-161.88	-14.9	53.1	95.0	92.7	2.34	40.525		
800.0	795.6	761.6	761.6	1.9	1.3	-164.78	-14.9	53.1	113.3	110.6	2.69	42.155		
900.0	893.1	859.1	859.1	2.3	1.5	-167.18	-14.9	53.1	135.2	132.1	3.02	44.685		
1,000.0	989.6	955.6	955.6	2.8	1.7	-169.13	-14.9	53.1	160.5	157.2	3.35	47.851		
1,100.0	1,085.5	1,051.5	1,051.5	3.3	1.8	-170.73	-14.9	53.1	188.5	184.8	3.69	51.082		
1,200.0	1,181.4	1,147.4	1,147.4	3.8	2.0	-171.94	-14.9	53.1	216.7	212.7	4.03	53.788		
1,300.0	1,277.2	1,243.2	1,243.2	4.4	2.2	-172.88	-14.9	53.1	245.0	240.6	4.37	56.097		
1,400.0	1,373.1	1,339.1	1,339.1	4.9	2.3	-173.62	-14.9	53.1	273.3	268.6	4.70	58.087		
1,500.0	1,469.0	1,435.0	1,435.0	5.4	2.5	-174.22	-14.9	53.1	301.6	296.6	5.04	59.819		
1,600.0	1,564.8	1,530.8	1,530.8	6.0	2.7	-174.72	-14.9	53.1	330.0	324.6	5.38	61.338		
1,700.0	1,660.7	1,626.7	1,626.7	6.5	2.8	-175.14	-14.9	53.1	358.4	352.6	5.72	62.681		
1,800.0	1,756.5	1,722.5	1,722.5	7.0	3.0	-175.49	-14.9	53.1	386.8	380.7	6.05	63.876		
1,900.0	1,852.4	1,818.4	1,818.4	7.6	3.2	-175.80	-14.9	53.1	415.2	408.8	6.39	64.946		
2,000.0	1,948.2	1,914.2	1,914.2	8.1	3.3	-176.07	-14.9	53.1	443.6	436.9	6.73	65.910		
2,100.0	2,044.1	2,010.1	2,010.1	8.7	3.5	-176.31	-14.9	53.1	472.0	465.0	7.07	66.782		
2,200.0	2,140.0	2,106.0	2,106.0	9.2	3.7	-176.52	-14.9	53.1	500.5	493.1	7.41	67.575		
2,300.0	2,235.8	2,201.8	2,201.8	9.8	3.8	-176.71	-14.9	53.1	528.9	521.2	7.74	68.298		
2,400.0	2,331.7	2,297.7	2,297.7	10.3	4.0	-176.87	-14.9	53.1	557.4	549.3	8.08	68.962		
2,500.0	2,427.5	2,393.5	2,393.5	10.8	4.2	-177.03	-14.9	53.1	585.8	577.4	8.42	69.572		
2,600.0	2,523.4	2,489.4	2,489.4	11.4	4.3	-177.16	-14.9	53.1	614.3	605.5	8.76	70.135		
2,700.0	2,619.2	2,585.2	2,585.2	11.9	4.5	-177.29	-14.9	53.1	642.7	633.6	9.10	70.656		
2,800.0	2,715.1	2,681.1	2,681.1	12.5	4.7	-177.40	-14.9	53.1	671.2	661.8	9.43	71.139		
2,900.0	2,810.9	2,776.9	2,776.9	13.0	4.8	-177.51	-14.9	53.1	699.6	689.9	9.77	71.590		
3,000.0	2,906.8	2,872.8	2,872.8	13.5	5.0	-177.61	-14.9	53.1	728.1	718.0	10.11	72.009		
3,100.0	3,002.7	2,968.7	2,968.7	14.1	5.2	-177.70	-14.9	53.1	756.6	746.1	10.45	72.402		
3,200.0	3,098.5	3,064.5	3,064.5	14.6	5.3	-177.78	-14.9	53.1	785.1	774.3	10.79	72.770		
3,300.0	3,194.4	3,160.4	3,160.4	15.2	5.5	-177.86	-14.9	53.1	813.5	802.4	11.13	73.116		
3,400.0	3,290.2	3,256.2	3,256.2	15.7	5.7	-177.93	-14.9	53.1	842.0	830.5	11.46	73.441		
3,500.0	3,386.1	3,352.1	3,352.1	16.3	5.9	-178.00	-14.9	53.1	870.5	858.7	11.80	73.747		
3,600.0	3,481.9	3,447.9	3,447.9	16.8	6.0	-178.06	-14.9	53.1	898.9	886.8	12.14	74.036		
3,700.0	3,577.8	3,543.8	3,543.8	17.4	6.2	-178.12	-14.9	53.1	927.4	914.9	12.48	74.310		
3,800.0	3,673.6	3,639.6	3,639.6	17.9	6.4	-178.18	-14.9	53.1	955.9	943.1	12.82	74.569		
3,900.0	3,769.5	3,735.5	3,735.5	18.4	6.5	-178.23	-14.9	53.1	984.4	971.2	13.16	74.814		
4,000.0	3,865.4	3,831.4	3,831.4	19.0	6.7	-178.28	-14.9	53.1	1,012.8	999.3	13.50	75.048		
4,100.0	3,961.2	3,927.2	3,927.2	19.5	6.9	-178.33	-14.9	53.1	1,041.3	1,027.5	13.83	75.269		
4,200.0	4,057.1	4,023.1	4,023.1	20.1	7.0	-178.37	-14.9	53.1	1,069.8	1,055.6	14.17	75.480		
4,300.0	4,152.9	4,118.9	4,118.9	20.6	7.2	-178.41	-14.9	53.1	1,098.3	1,083.8	14.51	75.682		
4,400.0	4,248.8	4,214.8	4,214.8	21.2	7.4	-178.45	-14.9	53.1	1,126.8	1,111.9	14.85	75.874		
4,500.0	4,344.6	4,310.6	4,310.6	21.7	7.5	-178.49	-14.9	53.1	1,155.2	1,140.1	15.19	76.057		
4,600.0	4,440.5	4,406.5	4,406.5	22.2	7.7	-178.53	-14.9	53.1	1,183.7	1,168.2	15.53	76.232		
4,700.0	4,536.3	4,502.3	4,502.3	22.8	7.9	-178.56	-14.9	53.1	1,212.2	1,196.3	15.87	76.400		
4,800.0	4,632.2	4,598.2	4,598.2	23.3	8.0	-178.60	-14.9	53.1	1,240.7	1,224.5	16.21	76.561		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 4-6-26 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 74-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	4,919.8	4,926.0	4,854.0	25.0	15.2	75.66	721.5	-1,869.5	1,253.9	1,219.8	34.06	36.817		
5,200.0	5,015.6	5,018.0	4,946.0	25.5	15.3	76.87	723.7	-1,869.7	1,249.1	1,214.3	34.73	35.962		
5,300.0	5,111.5	5,112.9	5,040.9	26.1	15.4	78.11	725.9	-1,870.3	1,245.1	1,209.7	35.41	35.161		
5,400.0	5,207.3	5,208.2	5,136.2	26.6	15.6	79.35	728.1	-1,871.1	1,241.8	1,205.7	36.09	34.408		
5,500.0	5,303.2	5,304.2	5,232.1	27.1	15.7	80.60	730.2	-1,872.1	1,239.2	1,202.4	36.77	33.701		
5,600.0	5,399.1	5,402.5	5,330.4	27.7	15.8	81.87	732.2	-1,873.3	1,237.1	1,199.7	37.45	33.033		
5,700.0	5,494.9	5,503.1	5,430.9	28.2	15.9	83.17	733.9	-1,874.5	1,235.4	1,197.3	38.13	32.397		
5,800.0	5,590.8	5,600.1	5,527.9	28.8	16.1	84.41	735.3	-1,875.9	1,234.1	1,195.3	38.81	31.798		
5,900.0	5,686.6	5,696.3	5,624.2	29.3	16.2	85.63	736.5	-1,877.4	1,233.3	1,193.9	39.48	31.237		
5,982.0	5,765.2	5,775.9	5,703.7	29.8	16.3	86.63	737.4	-1,879.0	1,233.2	1,193.1	40.03	30.806		
6,000.0	5,782.5	5,793.4	5,721.2	29.9	16.3	86.85	737.5	-1,879.4	1,233.2	1,193.0	40.15	30.714		
6,100.0	5,878.3	5,889.7	5,817.4	30.4	16.4	88.02	738.3	-1,882.1	1,233.5	1,192.7	40.82	30.220		
6,200.0	5,974.2	5,981.1	5,908.8	30.9	16.6	89.12	739.1	-1,884.8	1,234.6	1,193.2	41.48	29.766		
6,300.0	6,070.0	6,076.2	6,003.9	31.5	16.7	90.28	740.5	-1,887.4	1,236.7	1,194.6	42.14	29.346		
6,400.0	6,165.9	6,181.2	6,108.8	32.0	16.8	91.60	741.8	-1,889.3	1,238.9	1,196.1	42.82	28.937		
6,500.0	6,261.8	6,282.0	6,209.7	32.6	16.9	92.90	742.7	-1,890.2	1,241.2	1,197.7	43.48	28.549		
6,600.0	6,357.6	6,380.5	6,308.1	33.1	17.1	94.19	743.4	-1,890.5	1,243.9	1,199.7	44.13	28.189		
6,700.0	6,453.5	6,475.6	6,403.2	33.7	17.2	95.44	744.1	-1,890.4	1,247.1	1,202.3	44.76	27.861		
6,800.0	6,549.3	6,570.1	6,497.7	34.2	17.3	96.67	744.9	-1,890.4	1,251.1	1,205.7	45.39	27.563		
6,900.0	6,645.2	6,666.0	6,593.6	34.8	17.4	97.92	745.7	-1,890.3	1,255.7	1,209.7	46.01	27.295		
7,400.0	7,121.9	7,140.2	7,067.7	37.2	18.0	39.18	749.9	-1,889.4	1,240.5	1,194.3	46.25	26.824		
7,500.0	7,209.8	7,227.8	7,155.4	37.5	18.1	29.40	750.9	-1,889.2	1,200.5	1,156.8	43.71	27.467		
7,600.0	7,289.6	7,307.5	7,235.1	37.7	18.3	24.47	751.8	-1,888.8	1,145.7	1,105.6	40.12	28.554		
7,700.0	7,358.8	7,376.9	7,304.5	37.8	18.4	22.31	752.6	-1,888.5	1,077.6	1,041.9	35.70	30.189		
7,800.0	7,415.5	7,434.1	7,361.6	37.9	18.4	22.25	753.3	-1,888.2	998.3	967.5	30.77	32.443		
7,900.0	7,457.9	7,477.3	7,404.8	38.0	18.5	24.75	753.9	-1,888.0	909.9	883.9	26.01	34.978		
8,000.0	7,484.6	7,505.1	7,432.7	38.1	18.5	33.06	754.3	-1,887.9	815.1	791.7	23.32	34.946		
8,100.0	7,494.9	7,516.7	7,444.3	38.2	18.5	70.90	754.4	-1,887.8	716.5	686.1	30.40	23.570		
8,200.0	7,495.0	7,518.1	7,445.7	38.3	18.5	82.55	754.4	-1,887.8	617.0	584.7	32.28	19.115		
8,300.0	7,495.0	7,519.5	7,447.0	38.5	18.5	83.72	754.4	-1,887.8	517.6	484.7	32.97	15.701		
8,400.0	7,495.0	7,520.8	7,448.4	38.8	18.6	84.90	754.5	-1,887.8	418.6	384.8	33.82	12.376		
8,500.0	7,495.0	7,522.1	7,449.7	39.1	18.6	86.08	754.5	-1,887.8	320.2	285.3	34.82	9.194		
8,600.0	7,495.0	7,523.5	7,451.0	39.5	18.6	87.27	754.5	-1,887.8	223.1	187.2	35.93	6.209		
8,700.0	7,495.0	7,524.8	7,452.4	40.0	18.6	88.46	754.5	-1,887.8	130.6	93.4	37.14	3.515		
8,800.0	7,495.0	7,526.2	7,453.7	40.6	18.6	89.65	754.5	-1,887.8	65.7	27.3	38.42	1.709		
8,813.7	7,495.0	7,526.3	7,453.9	40.7	18.6	89.82	754.5	-1,887.8	64.2	25.6	38.61	1.664 CC, ES, SF		
8,900.0	7,495.0	7,527.5	7,455.1	41.2	18.6	90.85	754.6	-1,887.8	107.6	67.8	39.76	2.706		
9,000.0	7,495.0	7,528.8	7,456.4	41.9	18.6	92.05	754.6	-1,887.8	197.1	155.9	41.14	4.790		
9,100.0	7,495.0	7,530.2	7,457.7	42.6	18.6	93.29	754.6	-1,887.8	293.5	250.8	42.66	6.879		
9,200.0	7,495.0	7,531.5	7,459.1	43.5	18.6	94.51	754.6	-1,887.8	391.7	347.6	44.09	8.883		
9,300.0	7,495.0	7,532.9	7,460.4	44.3	18.6	95.71	754.6	-1,887.8	490.6	445.1	45.54	10.774		
9,400.0	7,495.0	7,534.2	7,461.8	45.2	18.6	96.92	754.6	-1,887.8	589.9	542.9	46.99	12.555		
9,500.0	7,495.0	7,535.6	7,463.1	46.2	18.6	98.12	754.7	-1,887.8	689.4	641.0	48.44	14.233		
9,600.0	7,495.0	7,536.9	7,464.5	47.2	18.6	99.32	754.7	-1,887.8	789.0	739.2	49.88	15.819		
9,700.0	7,495.0	7,538.3	7,465.8	48.3	18.6	100.50	754.7	-1,887.8	888.8	837.4	51.31	17.322		
9,800.0	7,495.0	7,539.6	7,467.2	49.4	18.6	101.68	754.7	-1,887.8	988.5	935.8	52.72	18.749		
9,900.0	7,495.0	7,541.0	7,468.5	50.5	18.6	102.86	754.7	-1,887.8	1,088.3	1,034.2	54.12	20.110		
10,000.0	7,495.0	7,542.4	7,469.9	51.7	18.6	104.02	754.8	-1,887.8	1,188.2	1,132.7	55.49	21.410		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4B-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
0.0	0.0	1.0	1.0	0.0	0.0	90.05	0.0	10.1	10.1					
100.0	100.0	101.0	101.0	0.1	0.1	90.05	0.0	10.1	10.1	9.8	0.24	42.115		
200.0	200.0	201.0	201.0	0.3	0.3	90.05	0.0	10.1	10.1	9.5	0.59	17.121	CC, ES	
300.0	300.0	301.0	301.0	0.5	0.5	-166.16	0.0	10.1	11.8	10.8	0.94	12.545		
400.0	399.8	401.4	401.4	0.7	0.6	-169.04	-0.6	8.4	15.1	13.9	1.29	11.769		
500.0	499.5	501.9	501.7	0.9	0.8	-170.44	-2.2	3.3	18.6	16.9	1.64	11.341		
600.0	598.7	602.5	602.0	1.2	1.1	-171.05	-5.0	-5.1	22.0	20.0	1.99	11.063		
700.0	697.5	703.3	702.0	1.5	1.3	-171.19	-8.9	-16.8	25.4	23.1	2.34	10.857		
800.0	795.6	804.2	801.6	1.9	1.6	-171.02	-13.9	-31.9	28.8	26.1	2.70	10.687		
900.0	893.1	905.2	900.7	2.3	2.0	-170.64	-20.1	-50.4	32.3	29.2	3.06	10.528		
1,000.0	989.6	1,006.3	999.2	2.8	2.4	-170.11	-27.3	-72.2	35.7	32.2	3.44	10.367		
1,100.0	1,085.5	1,106.4	1,096.1	3.3	2.9	-169.62	-35.1	-95.9	39.3	35.5	3.83	10.257		
1,200.0	1,181.4	1,206.4	1,192.9	3.8	3.3	-169.24	-43.0	-119.6	43.0	38.8	4.23	10.163		
1,300.0	1,277.2	1,306.3	1,289.6	4.4	3.8	-168.91	-50.9	-143.4	46.8	42.1	4.64	10.076		
1,400.0	1,373.1	1,406.2	1,386.4	4.9	4.3	-168.64	-58.8	-167.1	50.5	45.4	5.05	9.995		
1,500.0	1,469.0	1,506.2	1,483.1	5.4	4.7	-168.40	-66.6	-190.8	54.2	48.8	5.47	9.921		
1,600.0	1,564.8	1,606.1	1,579.9	6.0	5.2	-168.19	-74.5	-214.6	58.0	52.1	5.88	9.852		
1,700.0	1,660.7	1,706.0	1,676.6	6.5	5.7	-168.01	-82.4	-238.3	61.7	55.4	6.30	9.789		
1,800.0	1,756.5	1,806.0	1,773.4	7.0	6.2	-167.85	-90.2	-262.0	65.4	58.7	6.72	9.731		
1,900.0	1,852.4	1,905.9	1,870.1	7.6	6.6	-167.70	-98.1	-285.8	69.2	62.0	7.15	9.678		
2,000.0	1,948.2	2,005.8	1,966.9	8.1	7.1	-167.57	-106.0	-309.5	72.9	65.3	7.57	9.628		
2,100.0	2,044.1	2,105.7	2,063.6	8.7	7.6	-167.46	-113.8	-333.3	76.6	68.6	8.00	9.583		
2,200.0	2,140.0	2,205.7	2,160.4	9.2	8.1	-167.35	-121.7	-357.0	80.4	71.9	8.42	9.540		
2,300.0	2,235.8	2,305.6	2,257.1	9.8	8.6	-167.25	-129.6	-380.7	84.1	75.2	8.85	9.501		
2,400.0	2,331.7	2,405.5	2,353.9	10.3	9.0	-167.16	-137.5	-404.5	87.8	78.6	9.28	9.464		
2,500.0	2,427.5	2,505.5	2,450.6	10.8	9.5	-167.08	-145.3	-428.2	91.6	81.9	9.71	9.430		
2,600.0	2,523.4	2,605.4	2,547.4	11.4	10.0	-167.01	-153.2	-451.9	95.3	85.2	10.14	9.399		
2,700.0	2,619.2	2,705.3	2,644.2	11.9	10.5	-166.94	-161.1	-475.7	99.0	88.5	10.57	9.369		
2,800.0	2,715.1	2,805.3	2,740.9	12.5	10.9	-166.88	-168.9	-499.4	102.8	91.8	11.00	9.341		
2,900.0	2,810.9	2,905.2	2,837.7	13.0	11.4	-166.82	-176.8	-523.1	106.5	95.1	11.43	9.315		
3,000.0	2,906.8	3,005.1	2,934.4	13.5	11.9	-166.76	-184.7	-546.9	110.2	98.4	11.87	9.290		
3,100.0	3,002.7	3,105.0	3,031.2	14.1	12.4	-166.71	-192.5	-570.6	114.0	101.7	12.30	9.267		
3,200.0	3,098.5	3,205.0	3,127.9	14.6	12.9	-166.66	-200.4	-594.4	117.7	105.0	12.73	9.245		
3,300.0	3,194.4	3,304.9	3,224.7	15.2	13.3	-166.61	-208.3	-618.1	121.5	108.3	13.17	9.225		
3,400.0	3,290.2	3,404.8	3,321.4	15.7	13.8	-166.57	-216.2	-641.8	125.2	111.6	13.60	9.205		
3,500.0	3,386.1	3,504.8	3,418.2	16.3	14.3	-166.53	-224.0	-665.6	128.9	114.9	14.03	9.187		
3,600.0	3,481.9	3,604.7	3,514.9	16.8	14.8	-166.49	-231.9	-689.3	132.7	118.2	14.47	9.169		
3,700.0	3,577.8	3,704.6	3,611.7	17.4	15.3	-166.46	-239.8	-713.0	136.4	121.5	14.90	9.152		
3,800.0	3,673.6	3,804.6	3,708.4	17.9	15.7	-166.42	-247.6	-736.8	140.1	124.8	15.34	9.137		
3,900.0	3,769.5	3,904.5	3,805.2	18.4	16.2	-166.39	-255.5	-760.5	143.9	128.1	15.77	9.121		
4,000.0	3,865.4	4,004.4	3,901.9	19.0	16.7	-166.36	-263.4	-784.2	147.6	131.4	16.21	9.107		
4,100.0	3,961.2	4,104.4	3,998.7	19.5	17.2	-166.33	-271.2	-808.0	151.4	134.7	16.64	9.093		
4,200.0	4,057.1	4,204.3	4,095.4	20.1	17.7	-166.30	-279.1	-831.7	155.1	138.0	17.08	9.080		
4,300.0	4,152.9	4,304.2	4,192.2	20.6	18.2	-166.28	-287.0	-855.4	158.8	141.3	17.52	9.068		
4,400.0	4,248.8	4,404.1	4,288.9	21.2	18.6	-166.25	-294.9	-879.2	162.6	144.6	17.95	9.056		
4,500.0	4,344.6	4,504.1	4,385.7	21.7	19.1	-166.23	-302.7	-902.9	166.3	147.9	18.39	9.044		
4,600.0	4,440.5	4,604.0	4,482.4	22.2	19.6	-166.20	-310.6	-926.7	170.0	151.2	18.82	9.033		
4,700.0	4,536.3	4,703.9	4,579.2	22.8	20.1	-166.18	-318.5	-950.4	173.8	154.5	19.26	9.023		
4,800.0	4,632.2	4,803.9	4,675.9	23.3	20.6	-166.16	-326.3	-974.1	177.5	157.8	19.70	9.012		
4,900.0	4,728.1	4,903.8	4,772.7	23.9	21.0	-166.14	-334.2	-997.9	181.2	161.1	20.13	9.003		
5,000.0	4,823.9	5,003.7	4,869.4	24.4	21.5	-166.12	-342.1	-1,021.6	185.0	164.4	20.57	8.993		
5,100.0	4,919.8	5,103.7	4,966.2	25.0	22.0	-166.10	-349.9	-1,045.3	188.7	167.7	21.01	8.984		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4B-26H-P268 - HZ - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,015.6	5,203.6	5,062.9	25.5	22.5	-166.08	-357.8	-1,069.1	192.5	171.0	21.44	8.976		
5,300.0	5,111.5	5,303.5	5,159.7	26.1	23.0	-166.07	-365.7	-1,092.8	196.2	174.3	21.88	8.967		
5,400.0	5,207.3	5,403.4	5,256.4	26.6	23.4	-166.05	-373.6	-1,116.5	199.9	177.6	22.32	8.959		
5,500.0	5,303.2	5,503.4	5,353.2	27.1	23.9	-166.03	-381.4	-1,140.3	203.7	180.9	22.75	8.951		
5,600.0	5,399.1	5,603.3	5,449.9	27.7	24.4	-166.02	-389.3	-1,164.0	207.4	184.2	23.19	8.944		
5,700.0	5,494.9	5,703.2	5,546.7	28.2	24.9	-166.00	-397.2	-1,187.8	211.1	187.5	23.63	8.936		
5,800.0	5,590.8	5,803.2	5,643.4	28.8	25.4	-165.99	-405.0	-1,211.5	214.9	190.8	24.06	8.929		
5,900.0	5,686.6	5,903.1	5,740.2	29.3	25.8	-165.97	-412.9	-1,235.2	218.6	194.1	24.50	8.923		
6,000.0	5,782.5	6,003.0	5,836.9	29.9	26.3	-165.96	-420.8	-1,259.0	222.4	197.4	24.94	8.916		
6,100.0	5,878.3	6,103.0	5,933.7	30.4	26.8	-165.95	-428.6	-1,282.7	226.1	200.7	25.38	8.910		
6,200.0	5,974.2	6,202.9	6,030.4	30.9	27.3	-165.94	-436.5	-1,306.4	229.8	204.0	25.81	8.903		
6,300.0	6,070.0	6,302.8	6,127.2	31.5	27.8	-165.92	-444.4	-1,330.2	233.6	207.3	26.25	8.897		
6,400.0	6,165.9	6,402.7	6,223.9	32.0	28.2	-165.91	-452.3	-1,353.9	237.3	210.6	26.69	8.892		
6,500.0	6,261.8	6,502.7	6,320.7	32.6	28.7	-165.90	-460.1	-1,377.6	241.0	213.9	27.13	8.886		
6,600.0	6,357.6	6,602.6	6,417.4	33.1	29.2	-165.89	-468.0	-1,401.4	244.8	217.2	27.56	8.880		
6,700.0	6,453.5	6,702.5	6,514.2	33.7	29.7	-165.88	-475.9	-1,425.1	248.5	220.5	28.00	8.875		
6,800.0	6,549.3	6,802.5	6,610.9	34.2	30.2	-165.87	-483.7	-1,448.9	252.3	223.8	28.44	8.870		
6,900.0	6,645.2	6,902.4	6,707.7	34.8	30.7	-165.86	-491.6	-1,472.6	256.0	227.1	28.88	8.865		
7,000.0	6,741.0	7,002.3	6,804.4	35.3	31.1	-165.85	-499.5	-1,496.3	259.7	230.4	29.31	8.860		
7,100.0	6,836.9	7,102.3	6,901.2	35.8	31.6	-165.84	-507.3	-1,520.1	263.5	233.7	29.75	8.855		
7,200.0	6,932.8	7,202.2	6,997.9	36.4	32.1	-177.66	-515.2	-1,543.8	267.2	236.9	30.23	8.837		
7,300.0	7,028.6	7,301.6	7,094.3	36.8	32.5	151.87	-519.2	-1,567.4	270.8	239.1	31.61	8.564		
7,400.0	7,121.9	7,402.8	7,191.7	37.2	32.9	133.74	-506.5	-1,591.3	274.6	241.9	32.67	8.404		
7,500.0	7,209.8	7,506.1	7,287.3	37.5	33.2	124.90	-475.6	-1,614.8	278.5	245.4	33.11	8.413		
7,600.0	7,289.6	7,611.7	7,377.9	37.7	33.4	120.60	-426.3	-1,637.0	282.4	249.6	32.82	8.604		
7,700.0	7,358.8	7,719.5	7,459.6	37.8	33.5	118.53	-359.3	-1,657.1	285.9	254.0	31.86	8.972		
7,800.0	7,415.5	7,829.2	7,528.8	37.9	33.6	117.59	-276.0	-1,674.0	288.8	258.3	30.47	9.478		
7,900.0	7,457.9	7,940.6	7,582.1	38.0	33.6	117.24	-179.3	-1,687.1	290.9	261.9	29.04	10.016		
8,000.0	7,484.6	8,053.3	7,616.4	38.1	33.7	117.20	-72.5	-1,695.5	292.0	263.9	28.10	10.391		
8,100.0	7,494.9	8,166.7	7,629.8	38.2	33.8	117.31	39.8	-1,698.8	292.0	263.8	28.10	10.388		
8,200.0	7,495.0	8,268.3	7,630.0	38.3	34.0	117.40	141.5	-1,698.9	291.2	262.4	28.81	10.106		
8,300.0	7,495.0	8,368.3	7,630.0	38.5	34.2	117.48	241.4	-1,698.9	290.4	260.6	29.80	9.744		
8,400.0	7,495.0	8,468.3	7,630.0	38.8	34.6	117.56	341.4	-1,698.9	289.6	258.6	31.08	9.320		
8,500.0	7,495.0	8,568.3	7,630.0	39.1	35.0	117.64	441.4	-1,698.9	288.9	256.3	32.59	8.863		
8,600.0	7,495.0	8,668.3	7,630.0	39.5	35.5	117.72	541.4	-1,698.9	288.1	253.8	34.32	8.393		
8,700.0	7,495.0	8,768.3	7,630.0	40.0	36.1	117.80	641.4	-1,698.9	287.3	251.1	36.23	7.929		
8,800.0	7,495.0	8,868.2	7,630.0	40.6	36.7	117.88	741.4	-1,698.9	286.5	248.3	38.30	7.482		
8,900.0	7,495.0	8,968.2	7,630.0	41.2	37.4	117.96	841.4	-1,698.9	285.8	245.3	40.49	7.058		
9,000.0	7,495.0	9,068.2	7,630.0	41.9	38.2	118.05	941.4	-1,698.9	285.0	242.2	42.79	6.661		
9,100.0	7,495.0	9,168.2	7,630.0	42.6	39.0	118.11	1,041.4	-1,698.9	284.4	239.0	45.34	6.272		
9,200.0	7,495.0	9,268.2	7,630.0	43.5	39.9	118.16	1,141.4	-1,698.9	283.9	236.1	47.82	5.938		
9,300.0	7,495.0	9,368.2	7,630.0	44.3	40.9	118.21	1,241.4	-1,698.9	283.5	233.2	50.36	5.629		
9,400.0	7,495.0	9,468.2	7,630.0	45.2	41.9	118.25	1,341.4	-1,698.9	283.1	230.1	52.96	5.345		
9,500.0	7,495.0	9,568.2	7,630.0	46.2	43.0	118.30	1,441.4	-1,698.9	282.7	227.1	55.61	5.083		
9,600.0	7,495.0	9,668.2	7,630.0	47.2	44.1	118.34	1,541.4	-1,698.9	282.2	223.9	58.30	4.841		
9,700.0	7,495.0	9,768.2	7,630.0	48.3	45.2	118.39	1,641.4	-1,698.9	281.8	220.8	61.02	4.618		
9,800.0	7,495.0	9,868.2	7,630.0	49.4	46.4	118.44	1,741.4	-1,698.9	281.4	217.6	63.77	4.412		
9,900.0	7,495.0	9,968.2	7,630.0	50.5	47.7	118.48	1,841.4	-1,698.9	281.0	214.4	66.55	4.222		
10,000.0	7,495.0	10,068.2	7,630.0	51.7	48.9	118.53	1,941.4	-1,698.9	280.6	211.2	69.35	4.046		
10,100.0	7,495.0	10,168.2	7,630.0	52.9	50.2	118.58	2,041.4	-1,698.9	280.1	208.0	72.17	3.882		
10,200.0	7,495.0	10,268.2	7,630.0	54.1	51.5	118.62	2,141.4	-1,698.9	279.7	204.7	75.00	3.729		
10,300.0	7,495.0	10,368.2	7,630.0	55.4	52.9	118.67	2,241.4	-1,698.9	279.3	201.4	77.85	3.588		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4B-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
10,400.0	7,495.0	10,468.2	7,630.0	56.7	54.2	118.72	2,341.4	-1,698.9	278.9	198.2	80.71	3.455		
10,500.0	7,495.0	10,568.2	7,630.0	58.0	55.6	118.77	2,441.4	-1,698.9	278.4	194.9	83.58	3.331		
10,600.0	7,495.0	10,668.2	7,630.0	59.4	57.0	118.81	2,541.4	-1,698.9	278.0	191.6	86.46	3.216		
10,700.0	7,495.0	10,768.2	7,630.0	60.7	58.5	118.86	2,641.4	-1,698.9	277.6	188.3	89.35	3.107		
10,800.0	7,495.0	10,868.2	7,630.0	62.1	59.9	118.91	2,741.4	-1,698.9	277.2	184.9	92.25	3.005		
10,900.0	7,495.0	10,968.2	7,630.0	63.5	61.4	118.96	2,841.4	-1,698.9	276.8	181.6	95.15	2.909		
11,000.0	7,495.0	11,068.2	7,630.0	64.9	62.9	119.01	2,941.4	-1,698.9	276.3	178.3	98.06	2.818		
11,100.0	7,495.0	11,168.2	7,630.0	66.4	64.3	119.06	3,041.4	-1,698.9	275.9	174.9	100.97	2.733		
11,200.0	7,495.0	11,268.2	7,630.0	67.8	65.9	119.10	3,141.4	-1,698.9	275.5	171.6	103.89	2.652		
11,300.0	7,495.0	11,368.2	7,630.0	69.3	67.4	119.15	3,241.4	-1,698.9	275.1	168.3	106.81	2.575		
11,400.0	7,495.0	11,468.2	7,630.0	70.8	68.9	119.20	3,341.4	-1,698.9	274.7	164.9	109.73	2.503		
11,500.0	7,495.0	11,568.2	7,630.0	72.3	70.4	119.25	3,441.4	-1,698.9	274.2	161.6	112.65	2.434		
11,600.0	7,495.0	11,668.2	7,630.0	73.8	72.0	119.30	3,541.4	-1,698.9	273.8	158.2	115.58	2.369		
11,700.0	7,495.0	11,768.2	7,630.0	75.3	73.6	119.35	3,641.4	-1,698.9	273.4	154.9	118.51	2.307		
11,800.0	7,495.0	11,868.2	7,630.0	76.8	75.1	119.40	3,741.4	-1,698.9	273.0	151.5	121.44	2.248		
11,900.0	7,495.0	11,968.2	7,630.0	78.4	76.7	119.45	3,841.4	-1,698.9	272.6	148.2	124.37	2.192		
12,000.0	7,495.0	12,068.2	7,630.0	79.9	78.3	119.50	3,941.4	-1,698.9	272.1	144.8	127.30	2.138		
12,100.0	7,495.0	12,168.2	7,630.0	81.5	79.9	119.55	4,041.4	-1,698.9	271.7	141.5	130.23	2.087		
12,200.0	7,495.0	12,268.2	7,630.0	83.0	81.5	119.60	4,141.4	-1,698.9	271.3	138.1	133.16	2.037		
12,300.0	7,495.0	12,368.2	7,630.0	84.6	83.1	119.65	4,241.4	-1,698.9	270.9	134.8	136.09	1.991		
12,400.0	7,495.0	12,468.2	7,630.0	86.2	84.7	119.70	4,341.4	-1,698.9	270.5	131.5	139.02	1.946		
12,500.0	7,495.0	12,568.2	7,630.0	87.8	86.3	119.75	4,441.4	-1,698.9	270.1	128.1	141.95	1.902		
12,600.0	7,495.0	12,668.2	7,630.0	89.3	87.9	119.80	4,541.4	-1,698.9	269.6	124.8	144.88	1.861		
12,700.0	7,495.0	12,768.2	7,630.0	90.9	89.6	119.85	4,641.4	-1,698.9	269.2	121.4	147.81	1.821		
12,800.0	7,495.0	12,868.2	7,630.0	92.5	91.2	119.90	4,741.4	-1,698.9	268.8	118.1	150.73	1.783		
12,900.0	7,495.0	12,968.2	7,630.0	94.1	92.8	119.95	4,841.4	-1,698.9	268.4	114.7	153.66	1.747		
13,000.0	7,495.0	13,068.2	7,630.0	95.8	94.5	120.00	4,941.4	-1,698.9	268.0	111.4	156.58	1.711		
13,100.0	7,495.0	13,168.2	7,630.0	97.4	96.1	120.06	5,041.4	-1,698.9	267.6	108.1	159.50	1.677		
13,200.0	7,495.0	13,268.2	7,630.0	99.0	97.8	120.11	5,141.4	-1,698.9	267.1	104.7	162.42	1.645		
13,300.0	7,495.0	13,368.2	7,630.0	100.6	99.4	120.16	5,241.4	-1,698.9	266.7	101.4	165.34	1.613		
13,400.0	7,495.0	13,468.2	7,630.0	102.3	101.1	120.21	5,341.4	-1,698.9	266.3	98.1	168.25	1.583		
13,500.0	7,495.0	13,568.2	7,630.0	103.9	102.7	120.26	5,441.4	-1,698.9	265.9	94.7	171.17	1.553		
13,600.0	7,495.0	13,668.2	7,630.0	105.5	104.4	120.32	5,541.4	-1,698.9	265.5	91.4	174.08	1.525		
13,700.0	7,495.0	13,768.2	7,630.0	107.2	106.0	120.37	5,641.4	-1,698.9	265.1	88.1	176.99	1.498 Level 3		
13,800.0	7,495.0	13,868.2	7,630.0	108.8	107.7	120.42	5,741.4	-1,698.9	264.6	84.8	179.90	1.471 Level 3		
13,900.0	7,495.0	13,968.2	7,630.0	110.5	109.4	120.47	5,841.4	-1,698.9	264.2	81.4	182.80	1.445 Level 3		
14,000.0	7,495.0	14,068.2	7,630.0	112.1	111.1	120.53	5,941.4	-1,698.9	263.8	78.1	185.70	1.421 Level 3		
14,100.0	7,495.0	14,168.2	7,630.0	113.8	112.7	120.58	6,041.4	-1,698.9	263.4	74.8	188.60	1.397 Level 3		
14,121.6	7,495.0	14,189.8	7,630.0	114.1	113.1	120.58	6,063.0	-1,698.9	263.4	73.9	189.49	1.390 Level 3		
14,200.0	7,495.0	14,268.2	7,630.0	115.5	114.4	120.51	6,141.4	-1,698.9	264.0	71.1	192.87	1.369 Level 3		
14,300.0	7,495.0	14,368.2	7,630.0	117.1	116.1	120.32	6,241.3	-1,698.9	265.5	69.3	196.22	1.353 Level 3		
14,400.0	7,495.0	14,468.1	7,630.0	118.8	117.8	120.13	6,341.3	-1,698.9	267.0	67.4	199.59	1.338 Level 3		
14,500.0	7,495.0	14,568.1	7,630.0	120.5	119.5	119.94	6,441.3	-1,698.9	268.5	65.5	202.96	1.323 Level 3		
14,600.0	7,495.0	14,668.1	7,630.0	122.2	121.1	119.76	6,541.3	-1,698.9	270.0	63.7	206.34	1.309 Level 3		
14,700.0	7,495.0	14,768.1	7,630.0	123.8	122.8	119.57	6,641.3	-1,698.9	271.5	61.8	209.72	1.295 Level 3		
14,800.0	7,495.0	14,868.1	7,630.0	125.5	124.5	119.39	6,741.3	-1,698.9	273.0	59.9	213.11	1.281 Level 3		
14,900.0	7,495.0	14,968.1	7,630.0	127.2	126.2	119.22	6,841.2	-1,698.9	274.6	58.1	216.50	1.268 Level 3		
14,980.5	7,495.0	15,048.2	7,630.0	128.6	127.6	119.07	6,921.4	-1,698.9	275.8	56.6	219.23	1.258 Level 3, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4C-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	90.05	0.0	20.1	20.1					
100.0	100.0	101.0	101.0	0.1	0.1	90.05	0.0	20.1	20.1	19.9	0.24	84.230		
200.0	200.0	201.0	201.0	0.3	0.3	90.05	0.0	20.1	20.1	19.6	0.59	34.242 CC, ES		
300.0	300.0	301.0	301.0	0.5	0.5	-165.07	0.0	20.1	21.8	20.9	0.94	23.285		
400.0	399.8	400.8	400.8	0.7	0.6	-167.92	0.0	20.1	26.9	25.6	1.29	20.933		
500.0	499.5	501.6	501.6	0.9	0.8	-170.14	-0.7	18.5	33.8	32.1	1.63	20.646		
600.0	598.7	602.7	602.5	1.2	1.0	-171.20	-2.6	13.4	40.7	38.7	1.98	20.482		
700.0	697.5	703.9	703.4	1.5	1.2	-171.60	-5.7	5.1	47.6	45.2	2.34	20.363		
800.0	795.6	805.5	804.1	1.9	1.5	-171.58	-10.2	-6.6	54.5	51.8	2.69	20.250		
900.0	893.1	907.2	904.6	2.3	1.8	-171.29	-15.9	-21.7	61.4	58.4	3.05	20.123		
1,000.0	989.6	1,009.2	1,004.7	2.8	2.2	-170.81	-23.0	-40.2	68.3	64.9	3.42	19.962		
1,100.0	1,085.5	1,110.6	1,103.4	3.3	2.6	-170.13	-31.1	-61.6	74.6	70.7	3.82	19.530		
1,200.0	1,181.4	1,210.5	1,200.5	3.8	3.0	-169.45	-39.4	-83.4	80.2	76.0	4.22	18.984		
1,300.0	1,277.2	1,310.3	1,297.6	4.4	3.4	-168.85	-47.7	-105.2	85.8	81.2	4.64	18.501		
1,400.0	1,373.1	1,410.1	1,394.6	4.9	3.8	-168.33	-56.0	-127.0	91.5	86.4	5.06	18.072		
1,500.0	1,469.0	1,510.0	1,491.7	5.4	4.3	-167.87	-64.3	-148.8	97.1	91.7	5.49	17.690		
1,600.0	1,564.8	1,609.8	1,588.8	6.0	4.7	-167.46	-72.6	-170.6	102.8	96.9	5.93	17.346		
1,700.0	1,660.7	1,709.6	1,685.9	6.5	5.2	-167.10	-80.9	-192.4	108.5	102.1	6.37	17.037		
1,800.0	1,756.5	1,809.5	1,782.9	7.0	5.6	-166.77	-89.2	-214.2	114.1	107.3	6.81	16.757		
1,900.0	1,852.4	1,909.3	1,880.0	7.6	6.0	-166.47	-97.5	-236.0	119.8	112.6	7.26	16.503		
2,000.0	1,948.2	2,009.2	1,977.1	8.1	6.5	-166.20	-105.8	-257.8	125.5	117.8	7.71	16.271		
2,100.0	2,044.1	2,109.0	2,074.1	8.7	6.9	-165.95	-114.1	-279.6	131.2	123.0	8.17	16.060		
2,200.0	2,140.0	2,208.8	2,171.2	9.2	7.4	-165.72	-122.4	-301.4	136.9	128.2	8.63	15.866		
2,300.0	2,235.8	2,308.7	2,268.3	9.8	7.8	-165.51	-130.7	-323.2	142.5	133.5	9.09	15.687		
2,400.0	2,331.7	2,408.5	2,365.4	10.3	8.3	-165.32	-139.0	-345.0	148.2	138.7	9.55	15.523		
2,500.0	2,427.5	2,508.3	2,462.4	10.8	8.7	-165.14	-147.3	-366.8	153.9	143.9	10.01	15.371		
2,600.0	2,523.4	2,608.2	2,559.5	11.4	9.2	-164.97	-155.6	-388.6	159.6	149.1	10.48	15.230		
2,700.0	2,619.2	2,708.0	2,656.6	11.9	9.6	-164.82	-163.9	-410.4	165.3	154.4	10.95	15.099		
2,800.0	2,715.1	2,807.9	2,753.7	12.5	10.1	-164.67	-172.2	-432.2	171.0	159.6	11.42	14.976		
2,900.0	2,810.9	2,907.7	2,850.7	13.0	10.5	-164.54	-180.5	-454.0	176.7	164.8	11.89	14.862		
3,000.0	2,906.8	3,007.5	2,947.8	13.5	11.0	-164.41	-188.8	-475.8	182.4	170.0	12.36	14.756		
3,100.0	3,002.7	3,107.4	3,044.9	14.1	11.4	-164.29	-197.1	-497.6	188.1	175.2	12.83	14.656		
3,200.0	3,098.5	3,207.2	3,142.0	14.6	11.9	-164.18	-205.4	-519.4	193.8	180.5	13.31	14.562		
3,300.0	3,194.4	3,307.0	3,239.0	15.2	12.3	-164.07	-213.7	-541.2	199.5	185.7	13.78	14.473		
3,400.0	3,290.2	3,406.9	3,336.1	15.7	12.8	-163.97	-222.0	-563.0	205.2	190.9	14.26	14.390		
3,500.0	3,386.1	3,506.7	3,433.2	16.3	13.2	-163.88	-230.3	-584.8	210.9	196.1	14.73	14.311		
3,600.0	3,481.9	3,606.5	3,530.3	16.8	13.7	-163.79	-238.6	-606.6	216.6	201.3	15.21	14.237		
3,700.0	3,577.8	3,706.4	3,627.3	17.4	14.1	-163.70	-246.9	-628.4	222.3	206.6	15.69	14.167		
3,800.0	3,673.6	3,806.2	3,724.4	17.9	14.6	-163.62	-255.1	-650.2	228.0	211.8	16.17	14.100		
3,900.0	3,769.5	3,906.1	3,821.5	18.4	15.0	-163.55	-263.4	-672.0	233.7	217.0	16.65	14.037		
4,000.0	3,865.4	4,005.9	3,918.5	19.0	15.5	-163.47	-271.7	-693.8	239.4	222.2	17.13	13.977		
4,100.0	3,961.2	4,105.7	4,015.6	19.5	15.9	-163.40	-280.0	-715.6	245.1	227.4	17.61	13.919		
4,200.0	4,057.1	4,205.6	4,112.7	20.1	16.4	-163.34	-288.3	-737.4	250.8	232.7	18.09	13.865		
4,300.0	4,152.9	4,305.4	4,209.8	20.6	16.8	-163.27	-296.6	-759.2	256.5	237.9	18.57	13.813		
4,400.0	4,248.8	4,405.2	4,306.8	21.2	17.3	-163.21	-304.9	-781.0	262.2	243.1	19.05	13.763		
4,500.0	4,344.6	4,505.1	4,403.9	21.7	17.7	-163.15	-313.2	-802.8	267.9	248.3	19.53	13.716		
4,600.0	4,440.5	4,604.9	4,501.0	22.2	18.2	-163.10	-321.5	-824.6	273.6	253.5	20.01	13.670		
4,700.0	4,536.3	4,704.8	4,598.1	22.8	18.6	-163.04	-329.8	-846.4	279.3	258.8	20.49	13.627		
4,800.0	4,632.2	4,804.6	4,695.1	23.3	19.1	-162.99	-338.1	-868.2	285.0	264.0	20.98	13.585		
4,900.0	4,728.1	4,904.4	4,792.2	23.9	19.5	-162.94	-346.4	-890.0	290.7	269.2	21.46	13.545		
5,000.0	4,823.9	5,004.3	4,889.3	24.4	20.0	-162.90	-354.7	-911.8	296.4	274.4	21.94	13.507		
5,100.0	4,919.8	5,104.1	4,986.4	25.0	20.4	-162.85	-363.0	-933.6	302.1	279.6	22.43	13.470		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4C-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,015.6	5,203.9	5,083.4	25.5	20.9	-162.81	-371.3	-955.4	307.8	284.9	22.91	13.434		
5,300.0	5,111.5	5,303.8	5,180.5	26.1	21.3	-162.76	-379.6	-977.2	313.5	290.1	23.39	13.400		
5,400.0	5,207.3	5,403.6	5,277.6	26.6	21.8	-162.72	-387.9	-999.0	319.2	295.3	23.88	13.367		
5,500.0	5,303.2	5,503.4	5,374.7	27.1	22.2	-162.68	-396.2	-1,020.8	324.9	300.5	24.36	13.336		
5,600.0	5,399.1	5,603.3	5,471.7	27.7	22.7	-162.65	-404.5	-1,042.6	330.6	305.7	24.85	13.305		
5,700.0	5,494.9	5,703.1	5,568.8	28.2	23.1	-162.61	-412.8	-1,064.5	336.3	311.0	25.33	13.276		
5,800.0	5,590.8	5,803.0	5,665.9	28.8	23.6	-162.57	-421.1	-1,086.3	342.0	316.2	25.82	13.248		
5,900.0	5,686.6	5,902.8	5,762.9	29.3	24.0	-162.54	-429.4	-1,108.1	347.7	321.4	26.30	13.220		
6,000.0	5,782.5	6,002.6	5,860.0	29.9	24.5	-162.51	-437.7	-1,129.9	353.4	326.6	26.79	13.194		
6,100.0	5,878.3	6,102.5	5,957.1	30.4	24.9	-162.47	-446.0	-1,151.7	359.1	331.8	27.27	13.168		
6,200.0	5,974.2	6,202.3	6,054.2	30.9	25.4	-162.44	-454.3	-1,173.5	364.8	337.1	27.76	13.143		
6,300.0	6,070.0	6,302.1	6,151.2	31.5	25.8	-162.41	-462.6	-1,195.3	370.5	342.3	28.24	13.119		
6,400.0	6,165.9	6,402.0	6,248.3	32.0	26.3	-162.38	-470.9	-1,217.1	376.2	347.5	28.73	13.096		
6,500.0	6,261.8	6,501.8	6,345.4	32.6	26.7	-162.35	-479.2	-1,238.9	381.9	352.7	29.21	13.073		
6,600.0	6,357.6	6,601.7	6,442.5	33.1	27.2	-162.33	-487.5	-1,260.7	387.6	357.9	29.70	13.051		
6,700.0	6,453.5	6,701.5	6,539.5	33.7	27.7	-162.30	-495.8	-1,282.5	393.3	363.1	30.19	13.030		
6,800.0	6,549.3	6,801.3	6,636.6	34.2	28.1	-162.27	-504.1	-1,304.3	399.0	368.4	30.67	13.010		
6,900.0	6,645.2	6,901.2	6,733.7	34.8	28.6	-162.25	-512.4	-1,326.1	404.7	373.6	31.16	12.990		
7,000.0	6,741.0	7,001.8	6,831.6	35.3	29.0	-162.36	-519.8	-1,348.0	410.4	378.9	31.54	13.011		
7,100.0	6,836.9	7,101.9	6,928.9	35.8	29.3	-164.32	-513.6	-1,369.9	415.9	385.3	30.63	13.580		
7,200.0	6,932.8	7,194.9	7,017.2	36.4	29.6	179.75	-492.4	-1,389.7	422.7	394.1	28.57	14.796		
7,300.0	7,028.6	7,282.6	7,096.4	36.8	29.7	142.82	-459.3	-1,407.5	431.6	404.8	26.77	16.120		
7,400.0	7,121.9	7,367.0	7,167.0	37.2	29.8	118.48	-416.1	-1,423.4	441.8	415.8	26.02	16.979		
7,500.0	7,209.8	7,450.0	7,229.7	37.5	29.9	103.98	-363.7	-1,437.5	452.5	426.4	26.08	17.354		
7,600.0	7,289.6	7,528.1	7,281.4	37.7	29.9	94.81	-306.3	-1,449.1	462.9	436.4	26.46	17.492		
7,700.0	7,358.8	7,605.9	7,324.9	37.8	29.9	88.58	-242.6	-1,458.8	472.3	445.5	26.77	17.643		
7,800.0	7,415.5	7,682.5	7,359.0	37.9	29.9	84.31	-174.6	-1,466.5	480.1	453.3	26.85	17.884		
7,900.0	7,457.9	7,758.1	7,383.8	38.0	30.0	81.49	-103.4	-1,472.1	485.8	459.1	26.73	18.179		
8,000.0	7,484.6	7,833.2	7,399.1	38.1	30.0	79.86	-30.1	-1,475.5	489.2	462.6	26.63	18.373		
8,100.0	7,494.9	7,907.9	7,404.9	38.2	30.1	79.29	44.4	-1,476.8	489.9	463.3	26.69	18.359		
8,200.0	7,495.0	8,005.0	7,405.0	38.3	30.3	79.28	141.5	-1,476.8	489.1	461.7	27.43	17.828		
8,300.0	7,495.0	8,105.0	7,405.0	38.5	30.6	79.26	241.4	-1,476.8	488.3	459.6	28.61	17.064		
8,400.0	7,495.0	8,205.0	7,405.0	38.8	31.0	79.24	341.4	-1,476.8	487.4	457.3	30.14	16.169		
8,500.0	7,495.0	8,305.0	7,405.0	39.1	31.4	79.22	441.4	-1,476.8	486.5	454.6	31.97	15.218		
8,600.0	7,495.0	8,405.0	7,405.0	39.5	32.0	79.20	541.4	-1,476.8	485.7	451.6	34.05	14.263		
8,700.0	7,495.0	8,505.0	7,405.0	40.0	32.6	79.18	641.4	-1,476.8	484.8	448.5	36.34	13.341		
8,800.0	7,495.0	8,605.0	7,405.0	40.6	33.3	79.16	741.4	-1,476.8	484.0	445.2	38.80	12.474		
8,900.0	7,495.0	8,705.0	7,405.0	41.2	34.1	79.14	841.4	-1,476.8	483.1	441.7	41.40	11.670		
9,000.0	7,495.0	8,805.0	7,405.0	41.9	35.0	79.12	941.4	-1,476.8	482.3	438.1	44.11	10.932		
9,100.0	7,495.0	8,905.0	7,405.0	42.6	35.9	79.11	1,041.4	-1,476.8	481.5	434.4	47.10	10.223		
9,200.0	7,495.0	9,005.0	7,405.0	43.5	36.9	79.10	1,141.4	-1,476.8	481.1	431.1	50.00	9.621		
9,300.0	7,495.0	9,105.0	7,405.0	44.3	37.9	79.08	1,241.4	-1,476.8	480.6	427.6	52.96	9.074		
9,400.0	7,495.0	9,205.0	7,405.0	45.2	39.0	79.07	1,341.4	-1,476.8	480.1	424.1	55.98	8.576		
9,500.0	7,495.0	9,305.0	7,405.0	46.2	40.2	79.06	1,441.4	-1,476.8	479.6	420.6	59.04	8.123		
9,600.0	7,495.0	9,405.0	7,405.0	47.2	41.4	79.05	1,541.4	-1,476.8	479.2	417.0	62.15	7.710		
9,700.0	7,495.0	9,505.0	7,405.0	48.3	42.6	79.04	1,641.4	-1,476.8	478.7	413.4	65.29	7.332		
9,800.0	7,495.0	9,605.0	7,405.0	49.4	43.9	79.03	1,741.4	-1,476.8	478.2	409.8	68.45	6.986		
9,900.0	7,495.0	9,704.9	7,405.0	50.5	45.2	79.02	1,841.4	-1,476.8	477.8	406.1	71.64	6.668		
10,000.0	7,495.0	9,804.9	7,405.0	51.7	46.5	79.01	1,941.4	-1,476.8	477.3	402.4	74.86	6.376		
10,100.0	7,495.0	9,904.9	7,405.0	52.9	47.8	79.00	2,041.4	-1,476.8	476.8	398.7	78.09	6.106		
10,200.0	7,495.0	10,004.9	7,405.0	54.1	49.2	78.99	2,141.4	-1,476.8	476.3	395.0	81.34	5.856		
10,300.0	7,495.0	10,104.9	7,405.0	55.4	50.6	78.98	2,241.4	-1,476.8	475.9	391.3	84.61	5.625		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4C-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
10,400.0	7,495.0	10,204.9	7,405.0	56.7	52.1	78.96	2,341.4	-1,476.8	475.4	387.5	87.88	5.409		
10,500.0	7,495.0	10,304.9	7,405.0	58.0	53.5	78.95	2,441.4	-1,476.8	474.9	383.8	91.17	5.209		
10,600.0	7,495.0	10,404.9	7,405.0	59.4	55.0	78.94	2,541.4	-1,476.8	474.5	380.0	94.47	5.022		
10,700.0	7,495.0	10,504.9	7,405.0	60.7	56.5	78.93	2,641.4	-1,476.8	474.0	376.2	97.78	4.847		
10,800.0	7,495.0	10,604.9	7,405.0	62.1	58.0	78.92	2,741.4	-1,476.8	473.5	372.4	101.10	4.683		
10,900.0	7,495.0	10,704.9	7,405.0	63.5	59.5	78.91	2,841.4	-1,476.8	473.0	368.6	104.43	4.530		
11,000.0	7,495.0	10,804.9	7,405.0	64.9	61.0	78.90	2,941.4	-1,476.8	472.6	364.8	107.76	4.385		
11,100.0	7,495.0	10,904.9	7,405.0	66.4	62.5	78.89	3,041.4	-1,476.8	472.1	361.0	111.10	4.249		
11,200.0	7,495.0	11,004.9	7,405.0	67.8	64.1	78.87	3,141.4	-1,476.8	471.6	357.2	114.44	4.121		
11,300.0	7,495.0	11,104.9	7,405.0	69.3	65.6	78.86	3,241.4	-1,476.8	471.1	353.4	117.79	4.000		
11,400.0	7,495.0	11,204.9	7,405.0	70.8	67.2	78.85	3,341.4	-1,476.8	470.7	349.5	121.15	3.885		
11,500.0	7,495.0	11,304.9	7,405.0	72.3	68.8	78.84	3,441.4	-1,476.8	470.2	345.7	124.51	3.777		
11,600.0	7,495.0	11,404.9	7,405.0	73.8	70.4	78.83	3,541.4	-1,476.8	469.7	341.9	127.87	3.674		
11,700.0	7,495.0	11,504.9	7,405.0	75.3	72.0	78.82	3,641.4	-1,476.8	469.3	338.0	131.24	3.576		
11,800.0	7,495.0	11,604.9	7,405.0	76.8	73.6	78.81	3,741.4	-1,476.8	468.8	334.2	134.61	3.483		
11,900.0	7,495.0	11,704.9	7,405.0	78.4	75.2	78.80	3,841.4	-1,476.8	468.3	330.3	137.98	3.394		
12,000.0	7,495.0	11,804.9	7,405.0	79.9	76.8	78.78	3,941.4	-1,476.8	467.8	326.5	141.35	3.310		
12,100.0	7,495.0	11,904.9	7,405.0	81.5	78.4	78.77	4,041.4	-1,476.8	467.4	322.6	144.73	3.229		
12,200.0	7,495.0	12,004.9	7,405.0	83.0	80.0	78.76	4,141.4	-1,476.8	466.9	318.8	148.11	3.152		
12,300.0	7,495.0	12,104.9	7,405.0	84.6	81.7	78.75	4,241.4	-1,476.8	466.4	314.9	151.50	3.079		
12,400.0	7,495.0	12,204.9	7,405.0	86.2	83.3	78.74	4,341.4	-1,476.8	466.0	311.1	154.88	3.009		
12,500.0	7,495.0	12,304.9	7,405.0	87.8	85.0	78.73	4,441.4	-1,476.8	465.5	307.2	158.27	2.941		
12,600.0	7,495.0	12,404.9	7,405.0	89.3	86.6	78.71	4,541.4	-1,476.8	465.0	303.4	161.66	2.877		
12,700.0	7,495.0	12,504.9	7,405.0	90.9	88.3	78.70	4,641.4	-1,476.8	464.5	299.5	165.05	2.815		
12,800.0	7,495.0	12,604.9	7,405.0	92.5	89.9	78.69	4,741.4	-1,476.8	464.1	295.6	168.44	2.755		
12,900.0	7,495.0	12,704.9	7,405.0	94.1	91.6	78.68	4,841.4	-1,476.8	463.6	291.8	171.83	2.698		
13,000.0	7,495.0	12,804.9	7,405.0	95.8	93.2	78.67	4,941.4	-1,476.8	463.1	287.9	175.23	2.643		
13,100.0	7,495.0	12,904.9	7,405.0	97.4	94.9	78.66	5,041.4	-1,476.8	462.7	284.0	178.62	2.590		
13,200.0	7,495.0	13,004.9	7,405.0	99.0	96.6	78.64	5,141.4	-1,476.8	462.2	280.2	182.02	2.539		
13,300.0	7,495.0	13,104.9	7,405.0	100.6	98.2	78.63	5,241.4	-1,476.8	461.7	276.3	185.42	2.490		
13,400.0	7,495.0	13,204.9	7,405.0	102.3	99.9	78.62	5,341.4	-1,476.8	461.2	272.4	188.81	2.443		
13,500.0	7,495.0	13,304.9	7,405.0	103.9	101.6	78.61	5,441.4	-1,476.8	460.8	268.6	192.21	2.397		
13,600.0	7,495.0	13,404.9	7,405.0	105.5	103.3	78.60	5,541.4	-1,476.8	460.3	264.7	195.61	2.353		
13,700.0	7,495.0	13,504.9	7,405.0	107.2	104.9	78.59	5,641.4	-1,476.8	459.8	260.8	199.02	2.311		
13,800.0	7,495.0	13,604.9	7,405.0	108.8	106.6	78.57	5,741.4	-1,476.8	459.4	256.9	202.42	2.269		
13,900.0	7,495.0	13,704.9	7,405.0	110.5	108.3	78.56	5,841.4	-1,476.8	458.9	253.1	205.82	2.230		
14,000.0	7,495.0	13,804.9	7,405.0	112.1	110.0	78.55	5,941.4	-1,476.8	458.4	249.2	209.22	2.191		
14,100.0	7,495.0	13,904.9	7,405.0	113.8	111.7	78.54	6,041.4	-1,476.8	457.9	245.3	212.63	2.154		
14,121.6	7,495.0	13,926.5	7,405.0	114.1	112.1	78.54	6,063.0	-1,476.8	457.9	244.3	213.64	2.143		
14,200.0	7,495.0	14,004.9	7,405.0	115.5	113.4	78.55	6,141.4	-1,476.8	458.6	241.3	217.31	2.110		
14,300.0	7,495.0	14,104.9	7,405.0	117.1	115.1	78.60	6,241.3	-1,476.8	460.3	239.6	220.76	2.085		
14,400.0	7,495.0	14,204.9	7,405.0	118.8	116.8	78.64	6,341.3	-1,476.8	462.0	237.8	224.21	2.061		
14,500.0	7,495.0	14,304.8	7,405.0	120.5	118.5	78.68	6,441.3	-1,476.8	463.7	236.1	227.66	2.037		
14,600.0	7,495.0	14,404.8	7,405.0	122.2	120.2	78.72	6,541.3	-1,476.8	465.4	234.3	231.11	2.014		
14,700.0	7,495.0	14,504.8	7,405.0	123.8	121.9	78.77	6,641.3	-1,476.8	467.2	232.6	234.56	1.992		
14,800.0	7,495.0	14,604.8	7,405.0	125.5	123.6	78.81	6,741.3	-1,476.8	468.9	230.9	238.01	1.970		
14,900.0	7,495.0	14,704.8	7,405.0	127.2	125.3	78.85	6,841.2	-1,476.8	470.6	229.1	241.47	1.949		
14,980.5	7,495.0	14,784.5	7,405.0	128.6	126.6	78.88	6,921.0	-1,476.8	472.0	227.7	244.24	1.932 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4D-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	1.0	1.0	0.0	0.0	90.05	0.0	29.9	29.9					
100.0	100.0	101.0	101.0	0.1	0.1	90.05	0.0	29.9	29.9	29.7	0.24	125.176		
200.0	200.0	201.0	201.0	0.3	0.3	90.05	0.0	29.9	29.9	29.3	0.59	50.888 CC, ES		
300.0	300.0	301.0	301.0	0.5	0.5	-164.67	0.0	29.9	31.6	30.7	0.94	33.730		
400.0	399.8	400.8	400.8	0.7	0.6	-166.81	0.0	29.9	36.7	35.4	1.29	28.529		
500.0	499.5	500.5	500.5	0.9	0.8	-169.30	0.0	29.9	45.2	43.6	1.63	27.687		
600.0	598.7	601.6	601.6	1.2	1.0	-171.07	-0.7	28.3	55.5	53.6	1.98	28.026		
700.0	697.5	703.1	703.0	1.5	1.2	-171.89	-2.9	23.3	65.9	63.6	2.33	28.287		
800.0	795.6	805.0	804.5	1.9	1.4	-172.14	-6.5	15.0	76.4	73.7	2.68	28.470		
900.0	893.1	907.3	905.9	2.3	1.7	-172.02	-11.5	3.4	86.8	83.8	3.04	28.573		
1,000.0	989.6	1,009.9	1,007.2	2.8	2.0	-171.66	-18.0	-11.6	97.3	93.9	3.40	28.589		
1,100.0	1,085.5	1,112.6	1,108.0	3.3	2.3	-171.06	-25.9	-30.0	106.8	103.1	3.79	28.194		
1,200.0	1,181.4	1,212.3	1,205.4	3.8	2.7	-170.39	-34.2	-49.1	115.2	111.0	4.19	27.507		
1,300.0	1,277.2	1,311.9	1,302.9	4.4	3.0	-169.81	-42.4	-68.2	123.5	118.9	4.59	26.897		
1,400.0	1,373.1	1,411.6	1,400.3	4.9	3.4	-169.31	-50.7	-87.3	131.9	126.8	5.00	26.352		
1,500.0	1,469.0	1,511.2	1,497.8	5.4	3.8	-168.86	-58.9	-106.4	140.2	134.8	5.42	25.863		
1,600.0	1,564.8	1,610.9	1,595.2	6.0	4.2	-168.47	-67.2	-125.5	148.6	142.7	5.84	25.422		
1,700.0	1,660.7	1,710.5	1,692.7	6.5	4.6	-168.11	-75.4	-144.6	156.9	150.7	6.27	25.023		
1,800.0	1,756.5	1,810.2	1,790.1	7.0	5.0	-167.80	-83.7	-163.7	165.3	158.6	6.70	24.661		
1,900.0	1,852.4	1,909.8	1,887.6	7.6	5.4	-167.51	-91.9	-182.8	173.7	166.6	7.14	24.331		
2,000.0	1,948.2	2,009.4	1,985.0	8.1	5.8	-167.25	-100.2	-201.9	182.1	174.5	7.58	24.029		
2,100.0	2,044.1	2,109.1	2,082.5	8.7	6.2	-167.01	-108.4	-221.0	190.5	182.4	8.02	23.753		
2,200.0	2,140.0	2,208.7	2,179.9	9.2	6.6	-166.79	-116.7	-240.1	198.9	190.4	8.46	23.499		
2,300.0	2,235.8	2,308.4	2,277.4	9.8	7.0	-166.59	-124.9	-259.2	207.3	198.3	8.91	23.265		
2,400.0	2,331.7	2,408.0	2,374.8	10.3	7.4	-166.41	-133.2	-278.3	215.6	206.3	9.36	23.049		
2,500.0	2,427.5	2,507.7	2,472.3	10.8	7.8	-166.24	-141.4	-297.4	224.0	214.2	9.81	22.848		
2,600.0	2,523.4	2,607.3	2,569.7	11.4	8.2	-166.08	-149.7	-316.5	232.4	222.2	10.26	22.662		
2,700.0	2,619.2	2,707.0	2,667.2	11.9	8.6	-165.93	-157.9	-335.6	240.8	230.1	10.71	22.488		
2,800.0	2,715.1	2,806.6	2,764.6	12.5	9.0	-165.80	-166.2	-354.7	249.2	238.1	11.16	22.327		
2,900.0	2,810.9	2,906.2	2,862.1	13.0	9.4	-165.67	-174.4	-373.8	257.6	246.0	11.62	22.175		
3,000.0	2,906.8	3,005.9	2,959.5	13.5	9.8	-165.55	-182.7	-392.9	266.1	254.0	12.07	22.034		
3,100.0	3,002.7	3,105.5	3,056.9	14.1	10.2	-165.43	-190.9	-412.0	274.5	261.9	12.53	21.901		
3,200.0	3,098.5	3,205.2	3,154.4	14.6	10.7	-165.33	-199.2	-431.1	282.9	269.9	12.99	21.776		
3,300.0	3,194.4	3,304.8	3,251.8	15.2	11.1	-165.23	-207.4	-450.2	291.3	277.8	13.45	21.658		
3,400.0	3,290.2	3,404.5	3,349.3	15.7	11.5	-165.13	-215.7	-469.3	299.7	285.8	13.91	21.547		
3,500.0	3,386.1	3,504.1	3,446.7	16.3	11.9	-165.04	-223.9	-488.4	308.1	293.7	14.37	21.442		
3,600.0	3,481.9	3,603.8	3,544.2	16.8	12.3	-164.96	-232.2	-507.5	316.5	301.7	14.83	21.343		
3,700.0	3,577.8	3,703.4	3,641.6	17.4	12.7	-164.88	-240.4	-526.6	324.9	309.6	15.29	21.249		
3,800.0	3,673.6	3,803.0	3,739.1	17.9	13.1	-164.80	-248.7	-545.7	333.3	317.6	15.75	21.159		
3,900.0	3,769.5	3,902.7	3,836.5	18.4	13.5	-164.73	-256.9	-564.8	341.7	325.5	16.22	21.074		
4,000.0	3,865.4	4,002.3	3,934.0	19.0	13.9	-164.66	-265.2	-583.9	350.1	333.5	16.68	20.994		
4,100.0	3,961.2	4,102.0	4,031.4	19.5	14.3	-164.60	-273.5	-603.0	358.6	341.4	17.14	20.917		
4,200.0	4,057.1	4,201.6	4,128.9	20.1	14.7	-164.53	-281.7	-622.1	367.0	349.4	17.61	20.844		
4,300.0	4,152.9	4,301.3	4,226.3	20.6	15.1	-164.47	-290.0	-641.2	375.4	357.3	18.07	20.774		
4,400.0	4,248.8	4,400.9	4,323.8	21.2	15.5	-164.42	-298.2	-660.3	383.8	365.3	18.53	20.707		
4,500.0	4,344.6	4,500.6	4,421.2	21.7	15.9	-164.36	-306.5	-679.4	392.2	373.2	19.00	20.643		
4,600.0	4,440.5	4,600.2	4,518.7	22.2	16.4	-164.31	-314.7	-698.5	400.6	381.2	19.46	20.582		
4,700.0	4,536.3	4,699.9	4,616.1	22.8	16.8	-164.26	-323.0	-717.6	409.0	389.1	19.93	20.524		
4,800.0	4,632.2	4,799.5	4,713.6	23.3	17.2	-164.21	-331.2	-736.7	417.5	397.1	20.40	20.467		
4,900.0	4,728.1	4,899.1	4,811.0	23.9	17.6	-164.16	-339.5	-755.8	425.9	405.0	20.86	20.414		
5,000.0	4,823.9	4,998.8	4,908.5	24.4	18.0	-164.12	-347.7	-774.9	434.3	413.0	21.33	20.362		
5,100.0	4,919.8	5,098.4	5,005.9	25.0	18.4	-164.08	-356.0	-794.0	442.7	420.9	21.80	20.312		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4D-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
5,200.0	5,015.6	5,198.1	5,103.4	25.5	18.8	-164.04	-364.2	-813.1	451.1	428.9	22.26	20.264		
5,300.0	5,111.5	5,297.7	5,200.8	26.1	19.2	-164.00	-372.5	-832.2	459.5	436.8	22.73	20.218		
5,400.0	5,207.3	5,397.4	5,298.3	26.6	19.6	-163.96	-380.7	-851.3	468.0	444.8	23.20	20.174		
5,500.0	5,303.2	5,497.0	5,395.7	27.1	20.0	-163.92	-389.0	-870.4	476.4	452.7	23.66	20.131		
5,600.0	5,399.1	5,596.7	5,493.2	27.7	20.4	-163.89	-397.2	-889.5	484.8	460.7	24.13	20.090		
5,700.0	5,494.9	5,696.3	5,590.6	28.2	20.8	-163.85	-405.5	-908.6	493.2	468.6	24.60	20.050		
5,800.0	5,590.8	5,795.9	5,688.0	28.8	21.2	-163.82	-413.7	-927.7	501.6	476.6	25.07	20.012		
5,900.0	5,686.6	5,895.6	5,785.5	29.3	21.7	-163.79	-422.0	-946.8	510.0	484.5	25.53	19.975		
6,000.0	5,782.5	5,995.2	5,882.9	29.9	22.1	-163.75	-430.2	-965.9	518.5	492.5	26.00	19.939		
6,100.0	5,878.3	6,094.9	5,980.4	30.4	22.5	-163.72	-438.5	-985.0	526.9	500.4	26.47	19.904		
6,200.0	5,974.2	6,194.5	6,077.8	30.9	22.9	-163.69	-446.7	-1,004.1	535.3	508.4	26.94	19.870		
6,300.0	6,070.0	6,294.2	6,175.3	31.5	23.3	-163.67	-455.0	-1,023.2	543.7	516.3	27.41	19.838		
6,400.0	6,165.9	6,393.8	6,272.7	32.0	23.7	-163.64	-463.2	-1,042.3	552.1	524.3	27.88	19.806		
6,500.0	6,261.8	6,493.5	6,370.2	32.6	24.1	-163.61	-471.5	-1,061.4	560.5	532.2	28.35	19.776		
6,600.0	6,357.6	6,593.1	6,467.6	33.1	24.5	-163.59	-479.7	-1,080.5	569.0	540.2	28.81	19.746		
6,700.0	6,453.5	6,692.7	6,565.1	33.7	24.9	-163.56	-488.0	-1,099.6	577.4	548.1	29.28	19.717		
6,800.0	6,549.3	6,792.4	6,662.5	34.2	25.3	-163.54	-496.3	-1,118.7	585.8	556.0	29.75	19.689		
6,900.0	6,645.2	6,892.0	6,760.0	34.8	25.7	-163.51	-504.5	-1,137.8	594.2	564.0	30.22	19.662		
7,000.0	6,741.0	6,991.7	6,857.4	35.3	26.1	-163.49	-512.8	-1,156.9	602.6	571.9	30.69	19.636		
7,100.0	6,836.9	7,093.1	6,956.8	35.8	26.5	-163.47	-516.9	-1,176.4	611.0	580.1	30.87	19.794		
7,200.0	6,932.8	7,191.6	7,052.5	36.4	26.8	-177.87	-504.6	-1,195.6	619.2	589.3	29.93	20.692		
7,300.0	7,028.6	7,286.0	7,140.9	36.8	26.9	146.94	-477.4	-1,213.5	627.9	599.3	28.56	21.981		
7,400.0	7,121.9	7,377.4	7,221.2	37.2	27.0	124.15	-437.2	-1,230.1	636.5	608.9	27.53	23.123		
7,500.0	7,209.8	7,466.2	7,292.3	37.5	27.1	111.01	-386.2	-1,245.0	644.7	617.7	26.92	23.949		
7,600.0	7,289.6	7,550.0	7,351.4	37.7	27.1	102.94	-328.3	-1,257.7	652.0	625.3	26.70	24.421		
7,700.0	7,358.8	7,638.1	7,404.0	37.8	27.1	97.55	-258.6	-1,269.3	658.2	631.5	26.74	24.617		
7,800.0	7,415.5	7,721.9	7,443.6	37.9	27.1	93.96	-185.5	-1,278.4	662.9	635.9	26.92	24.623		
7,900.0	7,457.9	7,804.6	7,472.1	38.0	27.2	91.63	-108.2	-1,285.3	665.7	638.6	27.16	24.510		
8,000.0	7,484.6	7,886.7	7,489.2	38.1	27.2	90.32	-28.1	-1,290.1	666.7	639.2	27.47	24.268		
8,100.0	7,494.9	7,968.8	7,495.0	38.2	27.4	89.90	53.6	-1,292.7	665.7	637.8	27.81	23.934		
8,200.0	7,495.0	8,068.2	7,495.0	38.3	27.6	89.91	153.0	-1,294.4	663.1	634.5	28.61	23.173		
8,300.0	7,495.0	8,168.2	7,495.0	38.5	28.0	89.91	253.0	-1,296.2	660.4	630.6	29.80	22.160		
8,400.0	7,495.0	8,268.1	7,495.0	38.8	28.4	89.91	352.9	-1,297.9	657.8	626.5	31.34	20.988		
8,500.0	7,495.0	8,368.1	7,495.0	39.1	29.0	89.91	452.9	-1,299.7	655.2	622.0	33.18	19.745		
8,600.0	7,495.0	8,468.1	7,495.0	39.5	29.6	89.91	552.8	-1,301.4	652.6	617.3	35.28	18.499		
8,700.0	7,495.0	8,568.0	7,495.0	40.0	30.3	89.91	652.8	-1,303.2	650.0	612.4	37.58	17.295		
8,800.0	7,495.0	8,668.0	7,495.0	40.6	31.1	89.91	752.7	-1,304.9	647.4	607.3	40.06	16.159		
8,900.0	7,495.0	8,767.9	7,495.0	41.2	32.0	89.91	852.7	-1,306.6	644.7	602.1	42.69	15.104		
9,000.0	7,495.0	8,867.9	7,495.0	41.9	33.0	89.91	952.6	-1,308.4	642.1	596.7	45.43	14.135		
9,100.0	7,495.0	8,967.9	7,495.0	42.6	34.0	89.91	1,052.6	-1,310.1	639.6	591.2	48.44	13.204		
9,200.0	7,495.0	9,067.9	7,495.0	43.5	35.1	89.91	1,152.5	-1,311.9	637.4	586.0	51.38	12.407		
9,300.0	7,495.0	9,167.8	7,495.0	44.3	36.2	89.91	1,252.5	-1,313.6	635.2	580.8	54.38	11.681		
9,400.0	7,495.0	9,267.8	7,495.0	45.2	37.4	89.91	1,352.5	-1,315.4	633.0	575.5	57.43	11.021		
9,500.0	7,495.0	9,367.8	7,495.0	46.2	38.6	89.91	1,452.4	-1,317.1	630.7	570.2	60.54	10.419		
9,600.0	7,495.0	9,467.8	7,495.0	47.2	39.9	89.91	1,552.4	-1,318.9	628.5	564.8	63.69	9.869		
9,700.0	7,495.0	9,567.7	7,495.0	48.3	41.2	89.91	1,652.3	-1,320.6	626.3	559.4	66.87	9.365		
9,800.0	7,495.0	9,667.7	7,495.0	49.4	42.6	89.91	1,752.3	-1,322.3	624.1	554.0	70.09	8.904		
9,900.0	7,495.0	9,767.7	7,495.0	50.5	43.9	89.91	1,852.3	-1,324.1	621.8	548.5	73.33	8.480		
10,000.0	7,495.0	9,867.7	7,495.0	51.7	45.3	89.91	1,952.2	-1,325.8	619.6	543.0	76.59	8.090		
10,100.0	7,495.0	9,967.6	7,495.0	52.9	46.7	89.91	2,052.2	-1,327.6	617.4	537.5	79.88	7.729		
10,200.0	7,495.0	10,067.6	7,495.0	54.1	48.2	89.91	2,152.1	-1,329.3	615.2	532.0	83.18	7.395		
10,300.0	7,495.0	10,167.6	7,495.0	55.4	49.6	89.91	2,252.1	-1,331.1	612.9	526.4	86.50	7.086		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4D-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
10,400.0	7,495.0	10,267.6	7,495.0	56.7	51.1	89.91	2,352.1	-1,332.8	610.7	520.9	89.84	6.798		
10,500.0	7,495.0	10,367.5	7,495.0	58.0	52.6	89.91	2,452.0	-1,334.6	608.5	515.3	93.18	6.530		
10,600.0	7,495.0	10,467.5	7,495.0	59.4	54.1	89.91	2,552.0	-1,336.3	606.3	509.7	96.54	6.280		
10,700.0	7,495.0	10,567.5	7,495.0	60.7	55.6	89.91	2,651.9	-1,338.1	604.0	504.1	99.91	6.046		
10,800.0	7,495.0	10,667.5	7,495.0	62.1	57.2	89.90	2,751.9	-1,339.8	601.8	498.5	103.29	5.826		
10,900.0	7,495.0	10,767.4	7,495.0	63.5	58.7	89.90	2,851.9	-1,341.5	599.6	492.9	106.67	5.621		
11,000.0	7,495.0	10,867.4	7,495.0	64.9	60.3	89.90	2,951.8	-1,343.3	597.4	487.3	110.07	5.427		
11,100.0	7,495.0	10,967.4	7,495.0	66.4	61.9	89.90	3,051.8	-1,345.0	595.1	481.7	113.47	5.245		
11,200.0	7,495.0	11,067.4	7,495.0	67.8	63.5	89.90	3,151.7	-1,346.8	592.9	476.0	116.88	5.073		
11,300.0	7,495.0	11,167.3	7,495.0	69.3	65.0	89.90	3,251.7	-1,348.5	590.7	470.4	120.29	4.910		
11,400.0	7,495.0	11,267.3	7,495.0	70.8	66.6	89.90	3,351.7	-1,350.3	588.4	464.7	123.71	4.757		
11,500.0	7,495.0	11,367.3	7,495.0	72.3	68.3	89.90	3,451.6	-1,352.0	586.2	459.1	127.13	4.611		
11,600.0	7,495.0	11,467.3	7,495.0	73.8	69.9	89.90	3,551.6	-1,353.8	584.0	453.4	130.56	4.473		
11,700.0	7,495.0	11,567.2	7,495.0	75.3	71.5	89.90	3,651.5	-1,355.5	581.8	447.8	133.99	4.342		
11,800.0	7,495.0	11,667.2	7,495.0	76.8	73.1	89.90	3,751.5	-1,357.2	579.5	442.1	137.42	4.217		
11,900.0	7,495.0	11,767.2	7,495.0	78.4	74.7	89.90	3,851.5	-1,359.0	577.3	436.5	140.86	4.098		
12,000.0	7,495.0	11,867.2	7,495.0	79.9	76.4	89.90	3,951.4	-1,360.7	575.1	430.8	144.30	3.985		
12,100.0	7,495.0	11,967.1	7,495.0	81.5	78.0	89.90	4,051.4	-1,362.5	572.9	425.1	147.75	3.877		
12,200.0	7,495.0	12,067.1	7,495.0	83.0	79.7	89.90	4,151.3	-1,364.2	570.6	419.4	151.20	3.774		
12,300.0	7,495.0	12,167.1	7,495.0	84.6	81.3	89.90	4,251.3	-1,366.0	568.4	413.8	154.65	3.676		
12,400.0	7,495.0	12,267.1	7,495.0	86.2	83.0	89.90	4,351.3	-1,367.7	566.2	408.1	158.10	3.581		
12,500.0	7,495.0	12,367.0	7,495.0	87.8	84.6	89.90	4,451.2	-1,369.5	564.0	402.4	161.56	3.491		
12,600.0	7,495.0	12,467.0	7,495.0	89.3	86.3	89.90	4,551.2	-1,371.2	561.7	396.7	165.02	3.404		
12,700.0	7,495.0	12,567.0	7,495.0	90.9	88.0	89.90	4,651.1	-1,372.9	559.5	391.0	168.48	3.321		
12,800.0	7,495.0	12,667.0	7,495.0	92.5	89.7	89.90	4,751.1	-1,374.7	557.3	385.3	171.94	3.241		
12,900.0	7,495.0	12,766.9	7,495.0	94.1	91.3	89.90	4,851.1	-1,376.4	555.1	379.7	175.40	3.165		
13,000.0	7,495.0	12,866.9	7,495.0	95.8	93.0	89.90	4,951.0	-1,378.2	552.8	374.0	178.87	3.091		
13,100.0	7,495.0	12,966.9	7,495.0	97.4	94.7	89.90	5,051.0	-1,379.9	550.6	368.3	182.33	3.020		
13,200.0	7,495.0	13,066.9	7,495.0	99.0	96.4	89.90	5,150.9	-1,381.7	548.4	362.6	185.80	2.951		
13,300.0	7,495.0	13,166.8	7,495.0	100.6	98.0	89.90	5,250.9	-1,383.4	546.2	356.9	189.27	2.886		
13,400.0	7,495.0	13,265.8	7,495.0	102.3	99.7	89.89	5,349.8	-1,385.1	543.9	351.2	192.72	2.822		
13,474.8	7,495.0	13,329.5	7,495.0	103.5	100.8	89.89	5,413.6	-1,385.5	543.1	348.0	195.13	2.783		
13,500.0	7,495.0	13,350.7	7,495.0	103.9	101.1	89.89	5,434.7	-1,385.4	543.2	347.3	195.94	2.772		
13,600.0	7,495.0	13,434.7	7,495.0	105.5	102.5	89.89	5,518.7	-1,383.1	545.4	346.3	199.13	2.739		
13,700.0	7,495.0	13,518.6	7,495.0	107.2	103.9	89.90	5,602.4	-1,378.4	550.5	348.2	202.33	2.721		
13,800.0	7,495.0	13,606.2	7,495.0	108.8	105.4	89.90	5,689.8	-1,371.0	558.5	352.9	205.58	2.717		
13,900.0	7,495.0	13,705.8	7,495.0	110.5	107.0	89.90	5,789.0	-1,361.8	567.3	358.2	209.05	2.713		
14,000.0	7,495.0	13,805.4	7,495.0	112.1	108.7	89.90	5,888.1	-1,352.6	576.0	363.5	212.52	2.710		
14,100.0	7,495.0	13,905.1	7,495.0	113.8	110.3	89.90	5,987.3	-1,343.4	584.8	368.8	215.99	2.707		
14,200.0	7,495.0	14,004.6	7,495.0	115.5	112.0	89.90	6,086.4	-1,334.2	594.7	374.0	220.68	2.695 SF		
14,300.0	7,495.0	14,104.0	7,495.0	117.1	113.6	89.90	6,185.4	-1,325.0	605.6	381.5	224.15	2.702		
14,400.0	7,495.0	14,203.4	7,495.0	118.8	115.3	89.91	6,284.4	-1,315.8	616.6	389.0	227.61	2.709		
14,500.0	7,495.0	14,302.8	7,495.0	120.5	116.9	89.91	6,383.3	-1,306.6	627.6	396.5	231.08	2.716		
14,600.0	7,495.0	14,402.1	7,495.0	122.2	118.6	89.91	6,482.3	-1,297.4	638.6	404.0	234.54	2.723		
14,700.0	7,495.0	14,501.5	7,495.0	123.8	120.3	89.91	6,581.3	-1,288.3	649.5	411.5	238.01	2.729		
14,800.0	7,495.0	14,600.9	7,495.0	125.5	121.9	89.91	6,680.2	-1,279.1	660.5	419.0	241.48	2.735		
14,900.0	7,495.0	14,700.3	7,495.0	127.2	123.6	89.91	6,779.2	-1,269.9	671.5	426.5	244.95	2.741		
14,980.5	7,495.0	14,780.4	7,495.0	128.6	124.9	89.92	6,858.9	-1,262.5	680.3	432.6	247.74	2.746		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4E-26H-P268 - HZ - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	90.05	0.0	40.0	40.0					
100.0	100.0	101.0	101.0	0.1	0.1	90.05	0.0	40.0	40.0	39.8	0.24	167.291	CC, ES	
200.0	200.0	201.0	201.0	0.3	0.3	90.05	0.0	40.0	40.0	39.4	0.59	68.009		
300.0	300.0	301.0	301.0	0.5	0.5	-164.46	0.0	40.0	41.7	40.7	0.94	44.473		
400.0	399.8	400.8	400.8	0.7	0.6	-166.15	0.0	40.0	46.7	45.5	1.29	36.348		
500.0	499.5	500.5	500.5	0.9	0.8	-168.28	0.0	40.0	55.2	53.6	1.63	33.818		
600.0	598.7	599.7	599.7	1.2	1.0	-170.35	0.0	40.0	67.2	65.2	1.98	33.975		
700.0	697.5	701.2	701.1	1.5	1.2	-171.72	-0.9	38.4	81.1	78.7	2.33	34.854		
800.0	795.6	803.1	802.9	1.9	1.4	-172.22	-3.5	33.7	95.1	92.4	2.67	35.541		
900.0	893.1	905.5	904.9	2.3	1.6	-172.16	-7.9	25.7	109.2	106.2	3.03	36.053		
1,000.0	989.6	1,008.4	1,007.0	2.8	1.8	-171.74	-14.1	14.5	123.4	120.0	3.39	36.395		
1,100.0	1,085.5	1,111.0	1,108.3	3.3	2.1	-171.05	-21.9	0.2	136.9	133.1	3.78	36.242		
1,200.0	1,181.4	1,210.2	1,206.0	3.8	2.4	-170.35	-30.1	-14.6	149.4	145.3	4.17	35.817		
1,300.0	1,277.2	1,309.4	1,303.8	4.4	2.7	-169.76	-38.3	-29.4	162.0	157.4	4.57	35.410		
1,400.0	1,373.1	1,408.6	1,401.5	4.9	3.0	-169.25	-46.5	-44.3	174.6	169.6	4.98	35.026		
1,500.0	1,469.0	1,507.8	1,499.2	5.4	3.3	-168.81	-54.6	-59.1	187.2	181.8	5.40	34.665		
1,600.0	1,564.8	1,607.0	1,597.0	6.0	3.7	-168.43	-62.8	-73.9	199.8	194.0	5.82	34.329		
1,700.0	1,660.7	1,706.2	1,694.7	6.5	4.0	-168.09	-71.0	-88.8	212.4	206.2	6.24	34.017		
1,800.0	1,756.5	1,805.3	1,792.5	7.0	4.3	-167.79	-79.1	-103.6	225.0	218.4	6.67	33.728		
1,900.0	1,852.4	1,904.5	1,890.2	7.6	4.7	-167.53	-87.3	-118.4	237.7	230.6	7.10	33.459		
2,000.0	1,948.2	2,003.7	1,987.9	8.1	5.0	-167.29	-95.5	-133.3	250.3	242.7	7.54	33.211		
2,100.0	2,044.1	2,102.9	2,085.7	8.7	5.3	-167.07	-103.7	-148.1	262.9	254.9	7.97	32.980		
2,200.0	2,140.0	2,202.1	2,183.4	9.2	5.7	-166.87	-111.8	-162.9	275.6	267.1	8.41	32.765		
2,300.0	2,235.8	2,301.3	2,281.1	9.8	6.0	-166.69	-120.0	-177.8	288.2	279.4	8.85	32.566		
2,400.0	2,331.7	2,400.5	2,378.9	10.3	6.4	-166.53	-128.2	-192.6	300.8	291.6	9.29	32.380		
2,500.0	2,427.5	2,499.7	2,476.6	10.8	6.7	-166.37	-136.4	-207.5	313.5	303.8	9.73	32.207		
2,600.0	2,523.4	2,598.9	2,574.4	11.4	7.0	-166.23	-144.5	-222.3	326.1	316.0	10.18	32.044		
2,700.0	2,619.2	2,698.1	2,672.1	11.9	7.4	-166.10	-152.7	-237.1	338.8	328.2	10.62	31.893		
2,800.0	2,715.1	2,797.3	2,769.8	12.5	7.7	-165.98	-160.9	-252.0	351.4	340.4	11.07	31.750		
2,900.0	2,810.9	2,896.5	2,867.6	13.0	8.1	-165.87	-169.1	-266.8	364.1	352.6	11.52	31.617		
3,000.0	2,906.8	2,995.7	2,965.3	13.5	8.4	-165.77	-177.2	-281.6	376.7	364.8	11.96	31.491		
3,100.0	3,002.7	3,094.9	3,063.0	14.1	8.7	-165.67	-185.4	-296.5	389.4	377.0	12.41	31.373		
3,200.0	3,098.5	3,194.1	3,160.8	14.6	9.1	-165.58	-193.6	-311.3	402.1	389.2	12.86	31.261		
3,300.0	3,194.4	3,293.3	3,258.5	15.2	9.4	-165.49	-201.7	-326.1	414.7	401.4	13.31	31.155		
3,400.0	3,290.2	3,392.5	3,356.2	15.7	9.8	-165.41	-209.9	-341.0	427.4	413.6	13.76	31.055		
3,500.0	3,386.1	3,491.6	3,454.0	16.3	10.1	-165.34	-218.1	-355.8	440.0	425.8	14.21	30.961		
3,600.0	3,481.9	3,590.8	3,551.7	16.8	10.5	-165.26	-226.3	-370.6	452.7	438.0	14.66	30.871		
3,700.0	3,577.8	3,690.0	3,649.5	17.4	10.8	-165.20	-234.4	-385.5	465.4	450.2	15.12	30.786		
3,800.0	3,673.6	3,789.2	3,747.2	17.9	11.1	-165.13	-242.6	-400.3	478.0	462.4	15.57	30.705		
3,900.0	3,769.5	3,888.4	3,844.9	18.4	11.5	-165.07	-250.8	-415.2	490.7	474.7	16.02	30.628		
4,000.0	3,865.4	3,987.6	3,942.7	19.0	11.8	-165.01	-259.0	-430.0	503.3	486.9	16.47	30.554		
4,100.0	3,961.2	4,086.8	4,040.4	19.5	12.2	-164.96	-267.1	-444.8	516.0	499.1	16.93	30.484		
4,200.0	4,057.1	4,186.0	4,138.1	20.1	12.5	-164.91	-275.3	-459.7	528.7	511.3	17.38	30.417		
4,300.0	4,152.9	4,285.2	4,235.9	20.6	12.9	-164.86	-283.5	-474.5	541.3	523.5	17.83	30.353		
4,400.0	4,248.8	4,384.4	4,333.6	21.2	13.2	-164.81	-291.7	-489.3	554.0	535.7	18.29	30.292		
4,500.0	4,344.6	4,483.6	4,431.4	21.7	13.6	-164.76	-299.8	-504.2	566.7	547.9	18.74	30.233		
4,600.0	4,440.5	4,582.8	4,529.1	22.2	13.9	-164.72	-308.0	-519.0	579.3	560.1	19.20	30.177		
4,700.0	4,536.3	4,682.0	4,626.8	22.8	14.2	-164.68	-316.2	-533.8	592.0	572.3	19.65	30.123		
4,800.0	4,632.2	4,781.2	4,724.6	23.3	14.6	-164.64	-324.3	-548.7	604.6	584.5	20.11	30.071		
4,900.0	4,728.1	4,880.4	4,822.3	23.9	14.9	-164.60	-332.5	-563.5	617.3	596.7	20.56	30.022		
5,000.0	4,823.9	4,979.6	4,920.0	24.4	15.3	-164.56	-340.7	-578.3	630.0	609.0	21.02	29.974		
5,100.0	4,919.8	5,078.7	5,017.8	25.0	15.6	-164.53	-348.9	-593.2	642.6	621.2	21.47	29.928		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4E-26H-P268 - HZ - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,015.6	5,177.9	5,115.5	25.5	16.0	-164.49	-357.0	-608.0	655.3	633.4	21.93	29.883		
5,300.0	5,111.5	5,277.1	5,213.3	26.1	16.3	-164.46	-365.2	-622.9	668.0	645.6	22.38	29.841		
5,400.0	5,207.3	5,376.3	5,311.0	26.6	16.7	-164.43	-373.4	-637.7	680.6	657.8	22.84	29.800		
5,500.0	5,303.2	5,475.5	5,408.7	27.1	17.0	-164.40	-381.6	-652.5	693.3	670.0	23.30	29.760		
5,600.0	5,399.1	5,574.7	5,506.5	27.7	17.3	-164.37	-389.7	-667.4	706.0	682.2	23.75	29.722		
5,700.0	5,494.9	5,673.9	5,604.2	28.2	17.7	-164.34	-397.9	-682.2	718.6	694.4	24.21	29.685		
5,800.0	5,590.8	5,773.1	5,701.9	28.8	18.0	-164.31	-406.1	-697.0	731.3	706.6	24.67	29.649		
5,900.0	5,686.6	5,872.3	5,799.7	29.3	18.4	-164.29	-414.3	-711.9	744.0	718.9	25.12	29.614		
6,000.0	5,782.5	5,971.5	5,897.4	29.9	18.7	-164.26	-422.4	-726.7	756.6	731.1	25.58	29.581		
6,100.0	5,878.3	6,070.7	5,995.1	30.4	19.1	-164.24	-430.6	-741.5	769.3	743.3	26.04	29.548		
6,200.0	5,974.2	6,169.9	6,092.9	30.9	19.4	-164.21	-438.8	-756.4	782.0	755.5	26.49	29.517		
6,300.0	6,070.0	6,269.1	6,190.6	31.5	19.8	-164.19	-446.9	-771.2	794.6	767.7	26.95	29.487		
6,400.0	6,165.9	6,368.3	6,288.4	32.0	20.1	-164.17	-455.1	-786.0	807.3	779.9	27.41	29.457		
6,500.0	6,261.8	6,467.5	6,386.1	32.6	20.4	-164.15	-463.3	-800.9	820.0	792.1	27.86	29.429		
6,600.0	6,357.6	6,566.7	6,483.8	33.1	20.8	-164.13	-471.5	-815.7	832.6	804.3	28.32	29.401		
6,700.0	6,453.5	6,665.8	6,581.6	33.7	21.1	-164.11	-479.6	-830.6	845.3	816.5	28.78	29.374		
6,800.0	6,549.3	6,765.0	6,679.3	34.2	21.5	-164.09	-487.8	-845.4	858.0	828.8	29.24	29.348		
6,900.0	6,645.2	6,864.2	6,777.0	34.8	21.8	-164.07	-496.0	-860.2	870.7	841.0	29.69	29.322		
7,000.0	6,741.0	6,963.4	6,874.8	35.3	22.2	-164.05	-504.2	-875.1	883.3	853.2	30.15	29.298		
7,100.0	6,836.9	7,062.6	6,972.5	35.8	22.5	-164.03	-512.3	-889.9	896.0	865.4	30.61	29.274		
7,200.0	6,932.8	7,161.6	7,070.1	36.4	22.8	-176.50	-518.0	-904.7	908.7	877.9	30.72	29.582		
7,300.0	7,028.6	7,259.9	7,166.8	36.8	23.0	149.65	-508.4	-919.4	921.2	891.1	30.09	30.613		
7,400.0	7,121.9	7,358.0	7,260.1	37.2	23.1	128.06	-482.4	-933.6	933.3	903.9	29.37	31.777		
7,500.0	7,209.8	7,455.7	7,347.5	37.5	23.1	115.98	-440.8	-946.8	944.5	915.8	28.68	32.930		
7,600.0	7,289.6	7,553.4	7,426.5	37.7	23.0	108.77	-384.9	-958.8	954.5	926.4	28.12	33.941		
7,700.0	7,358.8	7,651.0	7,495.0	37.8	22.9	104.17	-316.3	-969.2	963.0	935.3	27.75	34.707		
7,800.0	7,415.5	7,748.6	7,551.0	37.9	22.8	101.16	-237.0	-977.7	969.8	942.2	27.58	35.166		
7,900.0	7,457.9	7,846.2	7,592.8	38.0	22.8	99.24	-149.1	-984.1	974.6	947.0	27.61	35.295		
8,000.0	7,484.6	7,943.9	7,619.4	38.1	22.9	98.19	-55.3	-988.1	977.3	949.4	27.85	35.095		
8,100.0	7,494.9	8,041.7	7,629.8	38.2	23.0	97.87	41.8	-989.7	977.8	949.5	28.27	34.586		
8,200.0	7,495.0	8,141.4	7,630.0	38.3	23.2	97.88	141.5	-989.7	976.9	947.9	29.05	33.633		
8,300.0	7,495.0	8,241.4	7,630.0	38.5	23.6	97.89	241.5	-989.7	976.1	945.9	30.19	32.328		
8,400.0	7,495.0	8,341.4	7,630.0	38.8	24.1	97.90	341.4	-989.7	975.2	943.5	31.68	30.783		
8,500.0	7,495.0	8,441.4	7,630.0	39.1	24.7	97.91	441.4	-989.7	974.3	940.9	33.46	29.116		
8,600.0	7,495.0	8,541.4	7,630.0	39.5	25.4	97.91	541.4	-989.7	973.5	938.0	35.50	27.423		
8,700.0	7,495.0	8,641.4	7,630.0	40.0	26.2	97.92	641.4	-989.7	972.6	934.9	37.74	25.768		
8,800.0	7,495.0	8,741.4	7,630.0	40.6	27.2	97.93	741.4	-989.7	971.7	931.6	40.17	24.193		
8,900.0	7,495.0	8,841.3	7,630.0	41.2	28.1	97.93	841.4	-989.7	970.9	928.1	42.73	22.720		
9,000.0	7,495.0	8,941.3	7,630.0	41.9	29.2	97.94	941.4	-989.7	970.0	924.6	45.42	21.356		
9,100.0	7,495.0	9,041.3	7,630.0	42.6	30.3	97.95	1,041.4	-989.7	969.3	920.9	48.36	20.043		
9,200.0	7,495.0	9,141.3	7,630.0	43.5	31.5	97.95	1,141.4	-989.7	968.8	917.6	51.24	18.908		
9,300.0	7,495.0	9,241.3	7,630.0	44.3	32.7	97.95	1,241.4	-989.7	968.3	914.1	54.19	17.870		
9,400.0	7,495.0	9,341.3	7,630.0	45.2	34.0	97.96	1,341.4	-989.7	967.9	910.7	57.20	16.922		
9,500.0	7,495.0	9,441.3	7,630.0	46.2	35.3	97.96	1,441.4	-989.7	967.4	907.1	60.25	16.055		
9,600.0	7,495.0	9,541.3	7,630.0	47.2	36.7	97.97	1,541.4	-989.7	966.9	903.6	63.35	15.262		
9,700.0	7,495.0	9,641.3	7,630.0	48.3	38.1	97.97	1,641.4	-989.7	966.4	899.9	66.49	14.535		
9,800.0	7,495.0	9,741.3	7,630.0	49.4	39.5	97.97	1,741.4	-989.7	966.0	896.3	69.66	13.867		
9,900.0	7,495.0	9,841.3	7,630.0	50.5	41.0	97.98	1,841.4	-989.7	965.5	892.6	72.86	13.252		
10,000.0	7,495.0	9,941.3	7,630.0	51.7	42.4	97.98	1,941.4	-989.7	965.0	888.9	76.08	12.684		
10,100.0	7,495.0	10,041.3	7,630.0	52.9	43.9	97.99	2,041.4	-989.7	964.5	885.2	79.32	12.160		
10,200.0	7,495.0	10,141.3	7,630.0	54.1	45.4	97.99	2,141.4	-989.7	964.0	881.5	82.58	11.674		
10,300.0	7,495.0	10,241.3	7,630.0	55.4	47.0	97.99	2,241.4	-989.7	963.6	877.7	85.86	11.222		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4E-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
10,400.0	7,495.0	10,341.3	7,630.0	56.7	48.5	98.00	2,341.4	-989.7	963.1	873.9	89.15	10.803		
10,500.0	7,495.0	10,441.3	7,630.0	58.0	50.1	98.00	2,441.4	-989.7	962.6	870.2	92.46	10.411		
10,600.0	7,495.0	10,541.3	7,630.0	59.4	51.6	98.01	2,541.4	-989.7	962.1	866.4	95.78	10.046		
10,700.0	7,495.0	10,641.3	7,630.0	60.7	53.2	98.01	2,641.4	-989.7	961.7	862.6	99.11	9.703		
10,800.0	7,495.0	10,741.3	7,630.0	62.1	54.8	98.01	2,741.4	-989.7	961.2	858.7	102.44	9.383		
10,900.0	7,495.0	10,841.3	7,630.0	63.5	56.4	98.02	2,841.4	-989.7	960.7	854.9	105.79	9.081		
11,000.0	7,495.0	10,941.3	7,630.0	64.9	58.0	98.02	2,941.4	-989.7	960.2	851.1	109.14	8.798		
11,100.0	7,495.0	11,041.3	7,630.0	66.4	59.6	98.03	3,041.4	-989.7	959.8	847.3	112.51	8.531		
11,200.0	7,495.0	11,141.3	7,630.0	67.8	61.2	98.03	3,141.4	-989.7	959.3	843.4	115.87	8.279		
11,300.0	7,495.0	11,241.3	7,630.0	69.3	62.9	98.03	3,241.4	-989.7	958.8	839.6	119.25	8.040		
11,400.0	7,495.0	11,341.3	7,630.0	70.8	64.5	98.04	3,341.4	-989.7	958.3	835.7	122.63	7.815		
11,500.0	7,495.0	11,441.3	7,630.0	72.3	66.2	98.04	3,441.4	-989.7	957.9	831.8	126.01	7.601		
11,600.0	7,495.0	11,541.3	7,630.0	73.8	67.8	98.05	3,541.4	-989.7	957.4	828.0	129.40	7.399		
11,700.0	7,495.0	11,641.3	7,630.0	75.3	69.5	98.05	3,641.4	-989.7	956.9	824.1	132.79	7.206		
11,800.0	7,495.0	11,741.3	7,630.0	76.8	71.1	98.05	3,741.4	-989.7	956.4	820.2	136.19	7.023		
11,900.0	7,495.0	11,841.3	7,630.0	78.4	72.8	98.06	3,841.4	-989.7	956.0	816.4	139.59	6.848		
12,000.0	7,495.0	11,941.3	7,630.0	79.9	74.5	98.06	3,941.4	-989.7	955.5	812.5	143.00	6.682		
12,100.0	7,495.0	12,041.3	7,630.0	81.5	76.1	98.07	4,041.4	-989.7	955.0	808.6	146.41	6.523		
12,200.0	7,495.0	12,141.3	7,630.0	83.0	77.8	98.07	4,141.4	-989.7	954.5	804.7	149.82	6.371		
12,300.0	7,495.0	12,241.3	7,630.0	84.6	79.5	98.07	4,241.4	-989.7	954.0	800.8	153.23	6.226		
12,400.0	7,495.0	12,341.3	7,630.0	86.2	81.2	98.08	4,341.4	-989.7	953.6	796.9	156.64	6.088		
12,500.0	7,495.0	12,441.3	7,630.0	87.8	82.9	98.08	4,441.4	-989.7	953.1	793.0	160.06	5.955		
12,600.0	7,495.0	12,541.3	7,630.0	89.3	84.5	98.09	4,541.4	-989.7	952.6	789.1	163.48	5.827		
12,700.0	7,495.0	12,641.3	7,630.0	90.9	86.2	98.09	4,641.4	-989.7	952.1	785.2	166.90	5.705		
12,800.0	7,495.0	12,741.3	7,630.0	92.5	87.9	98.09	4,741.4	-989.7	951.7	781.3	170.33	5.587		
12,900.0	7,495.0	12,841.3	7,630.0	94.1	89.6	98.10	4,841.4	-989.7	951.2	777.4	173.76	5.474		
13,000.0	7,495.0	12,941.3	7,630.0	95.8	91.3	98.10	4,941.4	-989.7	950.7	773.5	177.18	5.366		
13,100.0	7,495.0	13,041.3	7,630.0	97.4	93.0	98.11	5,041.4	-989.7	950.2	769.6	180.61	5.261		
13,200.0	7,495.0	13,141.3	7,630.0	99.0	94.7	98.11	5,141.4	-989.7	949.8	765.7	184.04	5.161		
13,300.0	7,495.0	13,241.3	7,630.0	100.6	96.4	98.11	5,241.4	-989.7	949.3	761.8	187.48	5.064		
13,400.0	7,495.0	13,341.3	7,630.0	102.3	98.1	98.12	5,341.4	-989.7	948.8	757.9	190.91	4.970		
13,500.0	7,495.0	13,441.3	7,630.0	103.9	99.8	98.12	5,441.4	-989.7	948.3	754.0	194.34	4.880		
13,600.0	7,495.0	13,541.3	7,630.0	105.5	101.5	98.13	5,541.4	-989.7	947.9	750.1	197.78	4.792		
13,700.0	7,495.0	13,641.3	7,630.0	107.2	103.3	98.13	5,641.4	-989.7	947.4	746.2	201.22	4.708		
13,800.0	7,495.0	13,741.3	7,630.0	108.8	105.0	98.14	5,741.4	-989.7	946.9	742.3	204.66	4.627		
13,900.0	7,495.0	13,859.1	7,630.0	110.5	107.0	98.15	5,859.2	-990.8	946.6	737.2	208.40	4.537		
14,000.0	7,495.0	13,976.4	7,630.0	112.1	109.0	98.18	5,976.4	-994.2	942.2	730.1	212.12	4.442		
14,100.0	7,495.0	14,076.3	7,630.0	113.8	110.7	98.22	6,076.2	-997.9	938.0	722.5	215.54	4.352		
14,200.0	7,495.0	14,176.2	7,630.0	115.5	112.5	98.24	6,176.1	-1,001.7	934.9	714.9	220.06	4.249		
14,300.0	7,495.0	14,276.2	7,630.0	117.1	114.2	98.26	6,276.0	-1,005.4	932.9	709.4	223.49	4.174		
14,400.0	7,495.0	14,376.2	7,630.0	118.8	115.9	98.28	6,375.9	-1,009.2	930.9	704.0	226.93	4.102		
14,500.0	7,495.0	14,476.2	7,630.0	120.5	117.6	98.30	6,475.8	-1,012.9	929.0	698.6	230.36	4.033		
14,600.0	7,495.0	14,576.2	7,630.0	122.2	119.4	98.31	6,575.8	-1,016.7	927.0	693.2	233.80	3.965		
14,700.0	7,495.0	14,676.1	7,630.0	123.8	121.1	98.33	6,675.7	-1,020.5	925.0	687.7	237.23	3.899		
14,800.0	7,495.0	14,776.1	7,630.0	125.5	122.8	98.35	6,775.6	-1,024.2	923.0	682.3	240.67	3.835		
14,900.0	7,495.0	14,876.1	7,630.0	127.2	124.6	98.37	6,875.5	-1,028.0	921.0	676.9	244.11	3.773		
14,963.5	7,495.0	14,921.3	7,630.0	128.3	125.3	98.38	6,920.6	-1,029.7	919.9	673.9	245.98	3.740		
14,980.5	7,495.0	14,921.3	7,630.0	128.6	125.3	98.38	6,920.6	-1,029.7	920.1	673.8	246.27	3.736 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4F-26H-P268 - HZ - Plan #1														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	1.0	1.0	0.0	0.0	90.42	-0.4	50.1	50.1						
100.0	100.0	101.0	101.0	0.1	0.1	90.42	-0.4	50.1	50.1	49.8	0.24	209.412			
200.0	200.0	201.0	201.0	0.3	0.3	90.42	-0.4	50.1	50.1	49.5	0.59	85.132 CC, ES			
300.0	300.0	301.0	301.0	0.5	0.5	-163.97	-0.4	50.1	51.7	50.8	0.94	55.215			
400.0	399.8	400.8	400.8	0.7	0.6	-165.40	-0.4	50.1	56.8	55.5	1.29	44.160			
500.0	499.5	500.5	500.5	0.9	0.8	-167.29	-0.4	50.1	65.3	63.6	1.63	39.939			
600.0	598.7	599.7	599.7	1.2	1.0	-169.24	-0.4	50.1	77.2	75.2	1.98	38.993			
700.0	697.5	698.5	698.5	1.5	1.2	-171.00	-0.4	50.1	92.6	90.3	2.32	39.886			
800.0	795.6	800.2	800.2	1.9	1.3	-172.17	-1.3	48.6	110.0	107.3	2.67	41.224			
900.0	893.1	902.5	902.4	2.3	1.5	-172.58	-4.1	44.0	127.5	124.5	3.01	42.291			
1,000.0	989.6	1,005.5	1,004.9	2.8	1.7	-172.49	-8.9	36.2	145.2	141.8	3.37	43.115			
1,100.0	1,085.5	1,109.1	1,107.7	3.3	2.0	-172.06	-15.7	25.3	162.2	158.4	3.74	43.314			
1,200.0	1,181.4	1,211.6	1,208.9	3.8	2.3	-171.27	-24.2	11.6	176.2	172.1	4.14	42.577			
1,300.0	1,277.2	1,310.6	1,306.6	4.4	2.5	-170.54	-32.8	-2.3	189.7	185.1	4.54	41.797			
1,400.0	1,373.1	1,409.7	1,404.3	4.9	2.8	-169.90	-41.4	-16.2	203.1	198.2	4.95	41.078			
1,500.0	1,469.0	1,508.7	1,502.0	5.4	3.1	-169.34	-50.0	-30.0	216.6	211.3	5.36	40.417			
1,600.0	1,564.8	1,607.8	1,599.7	6.0	3.5	-168.85	-58.6	-43.9	230.1	224.4	5.78	39.809			
1,700.0	1,660.7	1,706.9	1,697.4	6.5	3.8	-168.41	-67.2	-57.8	243.7	237.5	6.21	39.250			
1,800.0	1,756.5	1,805.9	1,795.2	7.0	4.1	-168.02	-75.8	-71.6	257.2	250.6	6.64	38.737			
1,900.0	1,852.4	1,905.0	1,892.9	7.6	4.4	-167.67	-84.4	-85.5	270.8	263.7	7.08	38.264			
2,000.0	1,948.2	2,004.1	1,990.6	8.1	4.7	-167.35	-93.0	-99.4	284.3	276.8	7.52	37.829			
2,100.0	2,044.1	2,103.1	2,088.3	8.7	5.0	-167.06	-101.6	-113.2	297.9	289.9	7.96	37.427			
2,200.0	2,140.0	2,202.2	2,186.0	9.2	5.4	-166.79	-110.2	-127.1	311.4	303.0	8.40	37.056			
2,300.0	2,235.8	2,301.3	2,283.7	9.8	5.7	-166.55	-118.8	-140.9	325.0	316.2	8.85	36.711			
2,400.0	2,331.7	2,400.3	2,381.4	10.3	6.0	-166.33	-127.4	-154.8	338.6	329.3	9.30	36.392			
2,500.0	2,427.5	2,499.4	2,479.1	10.8	6.4	-166.12	-136.0	-168.7	352.2	342.4	9.76	36.095			
2,600.0	2,523.4	2,598.5	2,576.9	11.4	6.7	-165.93	-144.6	-182.5	365.8	355.6	10.21	35.818			
2,700.0	2,619.2	2,697.5	2,674.6	11.9	7.0	-165.75	-153.2	-196.4	379.4	368.7	10.67	35.560			
2,800.0	2,715.1	2,796.6	2,772.3	12.5	7.3	-165.59	-161.8	-210.3	393.0	381.9	11.13	35.318			
2,900.0	2,810.9	2,895.7	2,870.0	13.0	7.7	-165.43	-170.4	-224.1	406.6	395.0	11.59	35.092			
3,000.0	2,906.8	2,994.7	2,967.7	13.5	8.0	-165.29	-179.0	-238.0	420.2	408.1	12.05	34.879			
3,100.0	3,002.7	3,093.8	3,065.4	14.1	8.3	-165.16	-187.6	-251.9	433.8	421.3	12.51	34.680			
3,200.0	3,098.5	3,192.9	3,163.1	14.6	8.7	-165.03	-196.2	-265.7	447.4	434.4	12.97	34.492			
3,300.0	3,194.4	3,291.9	3,260.8	15.2	9.0	-164.91	-204.8	-279.6	461.0	447.6	13.44	34.315			
3,400.0	3,290.2	3,391.0	3,358.6	15.7	9.3	-164.80	-213.4	-293.5	474.6	460.7	13.90	34.147			
3,500.0	3,386.1	3,490.0	3,456.3	16.3	9.7	-164.69	-222.0	-307.3	488.3	473.9	14.37	33.989			
3,600.0	3,481.9	3,589.1	3,554.0	16.8	10.0	-164.59	-230.6	-321.2	501.9	487.0	14.83	33.839			
3,700.0	3,577.8	3,688.2	3,651.7	17.4	10.3	-164.50	-239.2	-335.0	515.5	500.2	15.30	33.697			
3,800.0	3,673.6	3,787.2	3,749.4	17.9	10.7	-164.41	-247.8	-348.9	529.1	513.3	15.76	33.562			
3,900.0	3,769.5	3,886.3	3,847.1	18.4	11.0	-164.32	-256.4	-362.8	542.7	526.5	16.23	33.434			
4,000.0	3,865.4	3,985.4	3,944.8	19.0	11.3	-164.24	-265.0	-376.6	556.3	539.6	16.70	33.312			
4,100.0	3,961.2	4,084.4	4,042.5	19.5	11.7	-164.16	-273.5	-390.5	570.0	552.8	17.17	33.196			
4,200.0	4,057.1	4,183.5	4,140.3	20.1	12.0	-164.09	-282.1	-404.4	583.6	566.0	17.64	33.085			
4,300.0	4,152.9	4,282.6	4,238.0	20.6	12.3	-164.02	-290.7	-418.2	597.2	579.1	18.11	32.979			
4,400.0	4,248.8	4,381.6	4,335.7	21.2	12.7	-163.95	-299.3	-432.1	610.8	592.3	18.58	32.878			
4,500.0	4,344.6	4,480.7	4,433.4	21.7	13.0	-163.89	-307.9	-446.0	624.5	605.4	19.05	32.781			
4,600.0	4,440.5	4,579.8	4,531.1	22.2	13.3	-163.82	-316.5	-459.8	638.1	618.6	19.52	32.688			
4,700.0	4,536.3	4,678.8	4,628.8	22.8	13.7	-163.77	-325.1	-473.7	651.7	631.7	19.99	32.600			
4,800.0	4,632.2	4,777.9	4,726.5	23.3	14.0	-163.71	-333.7	-487.6	665.4	644.9	20.46	32.514			
4,900.0	4,728.1	4,877.0	4,824.2	23.9	14.3	-163.65	-342.3	-501.4	679.0	658.0	20.94	32.433			
5,000.0	4,823.9	4,976.0	4,922.0	24.4	14.7	-163.60	-350.9	-515.3	692.6	671.2	21.41	32.354			
5,100.0	4,919.8	5,075.1	5,019.7	25.0	15.0	-163.55	-359.5	-529.1	706.2	684.4	21.88	32.279			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4F-26H-P268 - HZ - Plan #1												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,015.6	5,174.1	5,117.4	25.5	15.3	-163.50	-368.1	-543.0	719.9	697.5	22.35	32.206	
5,300.0	5,111.5	5,273.2	5,215.1	26.1	15.7	-163.46	-376.7	-556.9	733.5	710.7	22.82	32.136	
5,400.0	5,207.3	5,372.3	5,312.8	26.6	16.0	-163.41	-385.3	-570.7	747.1	723.8	23.30	32.069	
5,500.0	5,303.2	5,471.3	5,410.5	27.1	16.3	-163.37	-393.9	-584.6	760.8	737.0	23.77	32.004	
5,600.0	5,399.1	5,570.4	5,508.2	27.7	16.7	-163.33	-402.5	-598.5	774.4	750.2	24.24	31.942	
5,700.0	5,494.9	5,669.5	5,605.9	28.2	17.0	-163.29	-411.1	-612.3	788.0	763.3	24.72	31.881	
5,800.0	5,590.8	5,768.5	5,703.7	28.8	17.3	-163.25	-419.7	-626.2	801.7	776.5	25.19	31.823	
5,900.0	5,686.6	5,867.6	5,801.4	29.3	17.7	-163.21	-428.3	-640.1	815.3	789.6	25.67	31.766	
6,000.0	5,782.5	5,966.7	5,899.1	29.9	18.0	-163.17	-436.9	-653.9	828.9	802.8	26.14	31.712	
6,100.0	5,878.3	6,065.7	5,996.8	30.4	18.3	-163.14	-445.5	-667.8	842.6	816.0	26.61	31.659	
6,200.0	5,974.2	6,164.8	6,094.5	30.9	18.7	-163.10	-454.1	-681.7	856.2	829.1	27.09	31.608	
6,300.0	6,070.0	6,263.9	6,192.2	31.5	19.0	-163.07	-462.7	-695.5	869.8	842.3	27.56	31.559	
6,400.0	6,165.9	6,362.9	6,289.9	32.0	19.3	-163.04	-471.3	-709.4	883.5	855.4	28.04	31.511	
6,500.0	6,261.8	6,462.0	6,387.6	32.6	19.7	-163.01	-479.9	-723.2	897.1	868.6	28.51	31.464	
6,600.0	6,357.6	6,561.1	6,485.4	33.1	20.0	-162.98	-488.5	-737.1	910.7	881.8	28.99	31.419	
6,700.0	6,453.5	6,660.1	6,583.1	33.7	20.4	-162.95	-497.1	-751.0	924.4	894.9	29.46	31.376	
6,800.0	6,549.3	6,759.2	6,680.8	34.2	20.7	-162.92	-505.7	-764.8	938.0	908.1	29.94	31.333	
6,900.0	6,645.2	6,858.3	6,778.5	34.8	21.0	-162.89	-514.3	-778.7	951.7	921.2	30.41	31.292	
7,000.0	6,741.0	6,960.5	6,879.6	35.3	21.3	-163.30	-515.9	-793.1	965.1	934.6	30.56	31.578	
7,100.0	6,836.9	7,058.0	6,974.8	35.8	21.4	-164.66	-500.6	-806.8	978.6	948.5	30.07	32.543	
7,200.0	6,932.8	7,146.1	7,057.4	36.4	21.4	-179.08	-472.9	-818.9	993.1	964.2	28.98	34.269	
7,300.0	7,028.6	7,228.5	7,130.1	36.8	21.4	145.10	-435.8	-829.6	1,008.9	981.3	27.60	36.553	
7,400.0	7,121.9	7,307.6	7,194.2	37.2	21.3	121.71	-390.6	-839.1	1,024.9	998.2	26.70	38.385	
7,500.0	7,209.8	7,384.0	7,249.8	37.5	21.2	108.01	-338.8	-847.5	1,040.5	1,014.2	26.31	39.546	
7,600.0	7,289.6	7,458.6	7,296.9	37.7	21.1	99.41	-281.5	-854.7	1,054.9	1,028.6	26.29	40.130	
7,700.0	7,358.8	7,531.6	7,335.5	37.8	21.1	93.65	-219.9	-860.7	1,067.4	1,040.9	26.44	40.374	
7,800.0	7,415.5	7,600.0	7,364.3	37.9	21.1	89.75	-158.1	-865.4	1,077.4	1,050.8	26.60	40.497	
7,900.0	7,457.9	7,674.6	7,387.3	38.0	21.1	87.15	-87.2	-869.3	1,084.5	1,057.7	26.80	40.473	
8,000.0	7,484.6	7,750.0	7,401.0	38.1	21.2	85.66	-13.2	-871.9	1,088.5	1,061.5	26.99	40.323	
8,100.0	7,494.9	7,815.5	7,405.0	38.2	21.3	85.20	52.1	-873.0	1,089.1	1,061.8	27.26	39.948	
8,200.0	7,495.0	7,914.3	7,405.0	38.3	21.6	85.20	150.9	-873.9	1,087.4	1,059.3	28.06	38.750	
8,300.0	7,495.0	8,014.3	7,405.0	38.5	22.0	85.19	250.9	-874.8	1,085.6	1,056.4	29.27	37.092	
8,400.0	7,495.0	8,114.3	7,405.0	38.8	22.5	85.18	350.9	-875.6	1,083.9	1,053.1	30.83	35.160	
8,500.0	7,495.0	8,214.3	7,405.0	39.1	23.2	85.18	450.9	-876.5	1,082.1	1,049.5	32.69	33.107	
8,600.0	7,495.0	8,314.2	7,405.0	39.5	24.0	85.17	550.8	-877.4	1,080.4	1,045.6	34.80	31.048	
8,700.0	7,495.0	8,414.2	7,405.0	40.0	24.9	85.16	650.8	-878.3	1,078.7	1,041.5	37.12	29.059	
8,800.0	7,495.0	8,514.2	7,405.0	40.6	25.9	85.15	750.8	-879.1	1,076.9	1,037.3	39.61	27.186	
8,900.0	7,495.0	8,614.2	7,405.0	41.2	26.9	85.14	850.8	-880.0	1,075.2	1,032.9	42.25	25.448	
9,000.0	7,495.0	8,714.2	7,405.0	41.9	28.0	85.14	950.8	-880.9	1,073.4	1,028.4	45.00	23.852	
9,100.0	7,495.0	8,814.2	7,405.0	42.6	29.2	85.13	1,050.7	-881.7	1,071.8	1,023.8	48.01	22.327	
9,200.0	7,495.0	8,914.2	7,405.0	43.5	30.5	85.12	1,150.7	-882.6	1,070.5	1,019.6	50.94	21.014	
9,300.0	7,495.0	9,014.1	7,405.0	44.3	31.8	85.12	1,250.7	-883.5	1,069.1	1,015.2	53.95	19.819	
9,400.0	7,495.0	9,114.1	7,405.0	45.2	33.1	85.11	1,350.7	-884.4	1,067.8	1,010.8	57.00	18.732	
9,500.0	7,495.0	9,214.1	7,405.0	46.2	34.5	85.10	1,450.7	-885.2	1,066.5	1,006.3	60.11	17.742	
9,600.0	7,495.0	9,314.1	7,405.0	47.2	35.9	85.10	1,550.7	-886.1	1,065.1	1,001.8	63.26	16.838	
9,700.0	7,495.0	9,414.1	7,405.0	48.3	37.3	85.09	1,650.7	-887.0	1,063.8	997.3	66.44	16.011	
9,800.0	7,495.0	9,514.1	7,405.0	49.4	38.8	85.09	1,750.7	-887.9	1,062.4	992.8	69.65	15.253	
9,900.0	7,495.0	9,614.1	7,405.0	50.5	40.3	85.08	1,850.6	-888.7	1,061.1	988.2	72.89	14.557	
10,000.0	7,495.0	9,714.1	7,405.0	51.7	41.8	85.07	1,950.6	-889.6	1,059.7	983.6	76.15	13.916	
10,100.0	7,495.0	9,814.1	7,405.0	52.9	43.3	85.07	2,050.6	-890.5	1,058.4	978.9	79.43	13.325	
10,200.0	7,495.0	9,914.1	7,405.0	54.1	44.8	85.06	2,150.6	-891.3	1,057.0	974.3	82.73	12.777	
10,300.0	7,495.0	10,014.1	7,405.0	55.4	46.4	85.05	2,250.6	-892.2	1,055.7	969.6	86.04	12.269	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4F-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
10,400.0	7,495.0	10,114.0	7,405.0	56.7	47.9	85.05	2,350.6	-893.1	1,054.3	964.9	89.37	11.798		
10,500.0	7,495.0	10,214.0	7,405.0	58.0	49.5	85.04	2,450.6	-894.0	1,053.0	960.3	92.71	11.358		
10,600.0	7,495.0	10,314.0	7,405.0	59.4	51.1	85.04	2,550.5	-894.8	1,051.6	955.6	96.06	10.948		
10,700.0	7,495.0	10,414.0	7,405.0	60.7	52.7	85.03	2,650.5	-895.7	1,050.3	950.9	99.42	10.564		
10,800.0	7,495.0	10,514.0	7,405.0	62.1	54.3	85.02	2,750.5	-896.6	1,048.9	946.1	102.78	10.205		
10,900.0	7,495.0	10,614.0	7,405.0	63.5	56.0	85.02	2,850.5	-897.5	1,047.6	941.4	106.16	9.868		
11,000.0	7,495.0	10,714.0	7,405.0	64.9	57.6	85.01	2,950.5	-898.3	1,046.2	936.7	109.55	9.551		
11,100.0	7,495.0	10,814.0	7,405.0	66.4	59.2	85.00	3,050.5	-899.2	1,044.9	931.9	112.94	9.252		
11,200.0	7,495.0	10,914.0	7,405.0	67.8	60.9	85.00	3,150.5	-900.1	1,043.5	927.2	116.33	8.970		
11,300.0	7,495.0	11,014.0	7,405.0	69.3	62.5	84.99	3,250.5	-900.9	1,042.2	922.4	119.74	8.704		
11,400.0	7,495.0	11,114.0	7,405.0	70.8	64.2	84.98	3,350.4	-901.8	1,040.8	917.7	123.14	8.452		
11,500.0	7,495.0	11,213.9	7,405.0	72.3	65.8	84.98	3,450.4	-902.7	1,039.5	912.9	126.55	8.214		
11,600.0	7,495.0	11,313.9	7,405.0	73.8	67.5	84.97	3,550.4	-903.6	1,038.1	908.2	129.97	7.987		
11,700.0	7,495.0	11,413.9	7,405.0	75.3	69.2	84.96	3,650.4	-904.4	1,036.8	903.4	133.39	7.773		
11,800.0	7,495.0	11,513.9	7,405.0	76.8	70.8	84.96	3,750.4	-905.3	1,035.4	898.6	136.81	7.568		
11,900.0	7,495.0	11,613.9	7,405.0	78.4	72.5	84.95	3,850.4	-906.2	1,034.1	893.8	140.24	7.374		
12,000.0	7,495.0	11,713.9	7,405.0	79.9	74.2	84.94	3,950.4	-907.1	1,032.7	889.1	143.67	7.188		
12,100.0	7,495.0	11,813.9	7,405.0	81.5	75.9	84.94	4,050.4	-907.9	1,031.4	884.3	147.10	7.011		
12,200.0	7,495.0	11,913.9	7,405.0	83.0	77.6	84.93	4,150.3	-908.8	1,030.0	879.5	150.54	6.842		
12,300.0	7,495.0	12,013.9	7,405.0	84.6	79.3	84.92	4,250.3	-909.7	1,028.7	874.7	153.98	6.681		
12,400.0	7,495.0	12,113.9	7,405.0	86.2	81.0	84.92	4,350.3	-910.5	1,027.3	869.9	157.42	6.526		
12,500.0	7,495.0	12,213.9	7,405.0	87.8	82.6	84.91	4,450.3	-911.4	1,026.0	865.1	160.86	6.378		
12,600.0	7,495.0	12,313.8	7,405.0	89.3	84.3	84.90	4,550.3	-912.3	1,024.7	860.3	164.31	6.236		
12,700.0	7,495.0	12,413.8	7,405.0	90.9	86.0	84.90	4,650.3	-913.2	1,023.3	855.6	167.75	6.100		
12,800.0	7,495.0	12,513.8	7,405.0	92.5	87.7	84.89	4,750.3	-914.0	1,022.0	850.8	171.20	5.969		
12,900.0	7,495.0	12,613.8	7,405.0	94.1	89.5	84.88	4,850.2	-914.9	1,020.6	846.0	174.65	5.844		
13,000.0	7,495.0	12,713.8	7,405.0	95.8	91.2	84.88	4,950.2	-915.8	1,019.3	841.2	178.10	5.723		
13,100.0	7,495.0	12,813.8	7,405.0	97.4	92.9	84.87	5,050.2	-916.7	1,017.9	836.4	181.56	5.607		
13,200.0	7,495.0	12,913.8	7,405.0	99.0	94.6	84.86	5,150.2	-917.5	1,016.6	831.6	185.01	5.495		
13,300.0	7,495.0	13,013.8	7,405.0	100.6	96.3	84.86	5,250.2	-918.4	1,015.2	826.7	188.47	5.387		
13,400.0	7,495.0	13,113.8	7,405.0	102.3	98.0	84.85	5,350.2	-919.3	1,013.9	821.9	191.92	5.283		
13,500.0	7,495.0	13,213.8	7,405.0	103.9	99.7	84.84	5,450.2	-920.1	1,012.5	817.1	195.38	5.182		
13,600.0	7,495.0	13,313.8	7,405.0	105.5	101.4	84.84	5,550.2	-921.0	1,011.2	812.3	198.84	5.085		
13,700.0	7,495.0	13,413.7	7,405.0	107.2	103.1	84.83	5,650.1	-921.9	1,009.8	807.5	202.30	4.992		
13,800.0	7,495.0	13,513.7	7,405.0	108.8	104.9	84.82	5,750.1	-922.8	1,008.5	802.7	205.76	4.901		
13,900.0	7,495.0	13,613.7	7,405.0	110.5	106.6	84.82	5,850.1	-923.6	1,007.1	797.9	209.22	4.814		
14,000.0	7,495.0	13,713.7	7,405.0	112.1	108.3	84.81	5,950.1	-924.5	1,005.8	793.1	212.69	4.729		
14,099.8	7,495.0	13,800.0	7,405.0	113.8	109.8	84.80	6,036.4	-925.0	1,004.8	788.8	215.91	4.654		
14,100.0	7,495.0	13,800.0	7,405.0	113.8	109.8	84.80	6,036.4	-925.0	1,004.8	788.8	215.92	4.653		
14,200.0	7,495.0	13,874.7	7,405.0	115.5	111.1	84.81	6,111.1	-923.7	1,007.1	787.1	220.02	4.577		
14,300.0	7,495.0	13,948.6	7,405.0	117.1	112.3	84.83	6,184.9	-920.6	1,013.2	790.1	223.04	4.542		
14,400.0	7,495.0	14,022.2	7,405.0	118.8	113.6	84.87	6,258.3	-915.5	1,021.7	795.7	226.06	4.520		
14,500.0	7,495.0	14,100.0	7,405.0	120.5	114.9	84.91	6,335.8	-908.1	1,032.9	803.7	229.15	4.507 SF		
14,600.0	7,495.0	14,168.2	7,405.0	122.2	116.0	84.96	6,403.4	-899.9	1,046.5	814.4	232.07	4.509		
14,700.0	7,495.0	14,240.4	7,405.0	123.8	117.2	85.01	6,474.9	-889.4	1,062.6	827.6	235.06	4.521		
14,800.0	7,495.0	14,311.9	7,405.0	125.5	118.4	85.07	6,545.4	-877.3	1,081.2	843.2	238.04	4.542		
14,900.0	7,495.0	14,391.0	7,405.0	127.2	119.7	85.15	6,623.0	-862.0	1,102.2	861.0	241.15	4.570		
14,980.5	7,495.0	14,469.6	7,405.0	128.6	121.0	85.23	6,700.0	-846.4	1,119.5	875.6	243.92	4.590		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4G-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	90.35	-0.4	60.1	60.1					
100.0	100.0	101.0	101.0	0.1	0.1	90.35	-0.4	60.1	60.1	59.9	0.24	251.526		
200.0	200.0	201.0	201.0	0.3	0.3	90.35	-0.4	60.1	60.1	59.6	0.59	102.253 CC, ES		
300.0	300.0	301.0	301.0	0.5	0.5	-163.94	-0.4	60.1	61.8	60.9	0.94	65.960		
400.0	399.8	400.8	400.8	0.7	0.6	-165.16	-0.4	60.1	66.9	65.6	1.29	51.985		
500.0	499.5	500.5	500.5	0.9	0.8	-166.82	-0.4	60.1	75.3	73.7	1.63	46.081		
600.0	598.7	599.7	599.7	1.2	1.0	-168.59	-0.4	60.1	87.2	85.3	1.98	44.039		
700.0	697.5	698.5	698.5	1.5	1.2	-170.27	-0.4	60.1	102.6	100.3	2.32	44.161		
800.0	795.6	796.6	796.6	1.9	1.3	-171.73	-0.4	60.1	121.5	118.8	2.66	45.628		
900.0	893.1	898.2	898.2	2.3	1.5	-172.65	-1.5	58.9	142.4	139.4	3.00	47.401		
1,000.0	989.6	1,000.5	1,000.3	2.8	1.7	-172.78	-5.0	54.9	163.8	160.5	3.35	48.887		
1,100.0	1,085.5	1,103.5	1,103.0	3.3	1.9	-172.39	-11.1	48.1	184.8	181.1	3.72	49.661		
1,200.0	1,181.4	1,205.9	1,204.6	3.8	2.1	-171.55	-19.4	38.8	203.1	199.0	4.11	49.381		
1,300.0	1,277.2	1,304.3	1,302.1	4.4	2.4	-170.74	-27.9	29.2	220.7	216.1	4.51	48.948		
1,400.0	1,373.1	1,402.7	1,399.7	4.9	2.6	-170.06	-36.5	19.5	238.3	233.4	4.91	48.506		
1,500.0	1,469.0	1,501.1	1,497.2	5.4	2.9	-169.46	-45.1	9.9	255.9	250.6	5.32	48.068		
1,600.0	1,564.8	1,599.5	1,594.8	6.0	3.1	-168.95	-53.7	0.2	273.6	267.8	5.74	47.644		
1,700.0	1,660.7	1,697.9	1,692.3	6.5	3.4	-168.50	-62.2	-9.4	291.3	285.1	6.17	47.237		
1,800.0	1,756.5	1,796.3	1,789.9	7.0	3.7	-168.10	-70.8	-19.0	309.0	302.4	6.59	46.852		
1,900.0	1,852.4	1,894.7	1,887.4	7.6	3.9	-167.74	-79.4	-28.7	326.7	319.6	7.03	46.489		
2,000.0	1,948.2	1,993.1	1,985.0	8.1	4.2	-167.42	-88.0	-38.3	344.4	336.9	7.46	46.147		
2,100.0	2,044.1	2,091.5	2,082.5	8.7	4.5	-167.13	-96.5	-47.9	362.1	354.2	7.90	45.827		
2,200.0	2,140.0	2,189.9	2,180.1	9.2	4.7	-166.87	-105.1	-57.6	379.9	371.5	8.34	45.526		
2,300.0	2,235.8	2,288.3	2,277.6	9.8	5.0	-166.63	-113.7	-67.2	397.6	388.8	8.79	45.245		
2,400.0	2,331.7	2,386.7	2,375.2	10.3	5.3	-166.41	-122.3	-76.9	415.4	406.1	9.23	44.981		
2,500.0	2,427.5	2,485.1	2,472.7	10.8	5.6	-166.21	-130.9	-86.5	433.1	423.4	9.68	44.734		
2,600.0	2,523.4	2,583.5	2,570.3	11.4	5.8	-166.02	-139.4	-96.1	450.9	440.7	10.13	44.502		
2,700.0	2,619.2	2,681.9	2,667.8	11.9	6.1	-165.85	-148.0	-105.8	468.6	458.1	10.58	44.284		
2,800.0	2,715.1	2,780.3	2,765.4	12.5	6.4	-165.69	-156.6	-115.4	486.4	475.4	11.04	44.079		
2,900.0	2,810.9	2,878.7	2,862.9	13.0	6.7	-165.55	-165.2	-125.1	504.2	492.7	11.49	43.886		
3,000.0	2,906.8	2,977.1	2,960.5	13.5	7.0	-165.41	-173.7	-134.7	522.0	510.0	11.94	43.704		
3,100.0	3,002.7	3,075.5	3,058.0	14.1	7.2	-165.28	-182.3	-144.3	539.7	527.3	12.40	43.532		
3,200.0	3,098.5	3,173.9	3,155.6	14.6	7.5	-165.16	-190.9	-154.0	557.5	544.7	12.86	43.370		
3,300.0	3,194.4	3,272.3	3,253.1	15.2	7.8	-165.05	-199.5	-163.6	575.3	562.0	13.31	43.216		
3,400.0	3,290.2	3,370.7	3,350.7	15.7	8.1	-164.94	-208.0	-173.3	593.1	579.3	13.77	43.071		
3,500.0	3,386.1	3,469.1	3,448.2	16.3	8.4	-164.84	-216.6	-182.9	610.9	596.7	14.23	42.933		
3,600.0	3,481.9	3,567.5	3,545.8	16.8	8.6	-164.75	-225.2	-192.5	628.7	614.0	14.69	42.802		
3,700.0	3,577.8	3,665.9	3,643.3	17.4	8.9	-164.66	-233.8	-202.2	646.5	631.3	15.15	42.677		
3,800.0	3,673.6	3,764.3	3,740.9	17.9	9.2	-164.58	-242.3	-211.8	664.3	648.7	15.61	42.559		
3,900.0	3,769.5	3,862.7	3,838.4	18.4	9.5	-164.50	-250.9	-221.5	682.1	666.0	16.07	42.446		
4,000.0	3,865.4	3,961.1	3,936.0	19.0	9.8	-164.42	-259.5	-231.1	699.8	683.3	16.53	42.339		
4,100.0	3,961.2	4,059.5	4,033.5	19.5	10.0	-164.35	-268.1	-240.7	717.6	700.7	16.99	42.236		
4,200.0	4,057.1	4,157.9	4,131.1	20.1	10.3	-164.28	-276.7	-250.4	735.4	718.0	17.45	42.138		
4,300.0	4,152.9	4,256.3	4,228.6	20.6	10.6	-164.21	-285.2	-260.0	753.2	735.3	17.92	42.044		
4,400.0	4,248.8	4,354.7	4,326.2	21.2	10.9	-164.15	-293.8	-269.6	771.0	752.7	18.38	41.955		
4,500.0	4,344.6	4,453.1	4,423.7	21.7	11.2	-164.09	-302.4	-279.3	788.8	770.0	18.84	41.869		
4,600.0	4,440.5	4,551.5	4,521.3	22.2	11.5	-164.04	-311.0	-288.9	806.6	787.3	19.30	41.786		
4,700.0	4,536.3	4,649.9	4,618.8	22.8	11.7	-163.98	-319.5	-298.6	824.4	804.7	19.77	41.707		
4,800.0	4,632.2	4,748.3	4,716.4	23.3	12.0	-163.93	-328.1	-308.2	842.2	822.0	20.23	41.631		
4,900.0	4,728.1	4,846.7	4,813.9	23.9	12.3	-163.88	-336.7	-317.8	860.1	839.4	20.69	41.558		
5,000.0	4,823.9	4,945.1	4,911.5	24.4	12.6	-163.83	-345.3	-327.5	877.9	856.7	21.16	41.488		
5,100.0	4,919.8	5,043.5	5,009.0	25.0	12.9	-163.79	-353.8	-337.1	895.7	874.0	21.62	41.421		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4G-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,015.6	5,141.9	5,106.6	25.5	13.1	-163.74	-362.4	-346.8	913.5	891.4	22.09	41.356		
5,300.0	5,111.5	5,240.3	5,204.1	26.1	13.4	-163.70	-371.0	-356.4	931.3	908.7	22.55	41.293		
5,400.0	5,207.3	5,338.7	5,301.7	26.6	13.7	-163.66	-379.6	-366.0	949.1	926.1	23.02	41.233		
5,500.0	5,303.2	5,437.1	5,399.2	27.1	14.0	-163.62	-388.2	-375.7	966.9	943.4	23.48	41.175		
5,600.0	5,399.1	5,535.5	5,496.8	27.7	14.3	-163.58	-396.7	-385.3	984.7	960.7	23.95	41.119		
5,700.0	5,494.9	5,633.9	5,594.3	28.2	14.6	-163.55	-405.3	-395.0	1,002.5	978.1	24.41	41.064		
5,800.0	5,590.8	5,732.3	5,691.9	28.8	14.8	-163.51	-413.9	-404.6	1,020.3	995.4	24.88	41.012		
5,900.0	5,686.6	5,830.7	5,789.4	29.3	15.1	-163.48	-422.5	-414.2	1,038.1	1,012.8	25.34	40.961		
6,000.0	5,782.5	5,929.1	5,887.0	29.9	15.4	-163.44	-431.0	-423.9	1,055.9	1,030.1	25.81	40.912		
6,100.0	5,878.3	6,027.5	5,984.5	30.4	15.7	-163.41	-439.6	-433.5	1,073.7	1,047.5	26.28	40.864		
6,200.0	5,974.2	6,125.9	6,082.1	30.9	16.0	-163.38	-448.2	-443.2	1,091.5	1,064.8	26.74	40.818		
6,300.0	6,070.0	6,224.3	6,179.6	31.5	16.3	-163.35	-456.8	-452.8	1,109.3	1,082.1	27.21	40.774		
6,400.0	6,165.9	6,322.7	6,277.2	32.0	16.5	-163.32	-465.3	-462.4	1,127.2	1,099.5	27.67	40.731		
6,500.0	6,261.8	6,421.1	6,374.7	32.6	16.8	-163.29	-473.9	-472.1	1,145.0	1,116.8	28.14	40.689		
6,600.0	6,357.6	6,519.5	6,472.3	33.1	17.1	-163.27	-482.5	-481.7	1,162.8	1,134.2	28.61	40.648		
6,700.0	6,453.5	6,617.9	6,569.8	33.7	17.4	-163.24	-491.1	-491.4	1,180.6	1,151.5	29.07	40.609		
6,800.0	6,549.3	6,716.3	6,667.4	34.2	17.7	-163.22	-499.6	-501.0	1,198.4	1,168.9	29.54	40.570		
6,900.0	6,645.2	6,814.7	6,764.9	34.8	18.0	-163.19	-508.2	-510.6	1,216.2	1,186.2	30.01	40.533		
7,000.0	6,741.0	6,913.1	6,862.5	35.3	18.2	-163.17	-516.8	-520.3	1,234.0	1,203.5	30.47	40.497 SF		
7,100.0	6,836.9	7,012.5	6,961.3	35.8	18.4	-163.15	-518.9	-530.0	1,251.8	1,221.1	30.70	40.775		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4H-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	2.0	2.0	0.0	0.0	90.31	-0.4	69.9	69.9					
100.0	100.0	102.0	102.0	0.1	0.1	90.31	-0.4	69.9	69.9	69.7	0.24	290.352		
200.0	200.0	202.0	202.0	0.3	0.3	90.31	-0.4	69.9	69.9	69.3	0.59	118.546 CC, ES		
300.0	300.0	302.0	302.0	0.5	0.5	-163.92	-0.4	69.9	71.6	70.7	0.94	76.264		
400.0	399.8	401.8	401.8	0.7	0.6	-164.98	-0.4	69.9	76.7	75.4	1.29	59.512		
500.0	499.5	501.5	501.5	0.9	0.8	-166.46	-0.4	69.9	85.1	83.5	1.64	52.001		
600.0	598.7	600.7	600.7	1.2	1.0	-168.09	-0.4	69.9	97.0	95.0	1.98	48.906		
700.0	697.5	699.5	699.5	1.5	1.2	-169.68	-0.4	69.9	112.3	110.0	2.33	48.285 SF		
800.0	795.6	797.6	797.6	1.9	1.3	-171.12	-0.4	69.9	131.2	128.5	2.67	49.203		
900.0	893.1	895.1	895.1	2.3	1.5	-172.35	-0.4	69.9	153.4	150.4	3.00	51.149		
1,000.0	989.6	993.6	993.6	2.8	1.7	-172.94	-1.9	69.7	178.6	175.3	3.34	53.559		
1,100.0	1,085.5	1,094.1	1,093.9	3.3	1.9	-172.61	-6.7	68.6	205.0	201.3	3.69	55.491		
1,200.0	1,181.4	1,198.5	1,198.0	3.8	2.1	-171.92	-13.9	64.6	228.7	224.6	4.08	56.040		
1,300.0	1,277.2	1,299.2	1,298.1	4.4	2.3	-171.10	-22.4	58.3	249.7	245.2	4.47	55.807		
1,400.0	1,373.1	1,396.9	1,395.3	4.9	2.5	-170.41	-30.8	52.0	270.6	265.7	4.87	55.531		
1,500.0	1,469.0	1,494.7	1,492.5	5.4	2.7	-169.81	-39.2	45.7	291.4	286.2	5.28	55.225		
1,600.0	1,564.8	1,592.4	1,589.7	6.0	2.9	-169.30	-47.6	39.3	312.3	306.6	5.69	54.907		
1,700.0	1,660.7	1,690.2	1,686.9	6.5	3.1	-168.85	-56.1	33.0	333.3	327.1	6.10	54.587		
1,800.0	1,756.5	1,788.0	1,784.1	7.0	3.4	-168.45	-64.5	26.6	354.2	347.7	6.53	54.273		
1,900.0	1,852.4	1,885.7	1,881.3	7.6	3.6	-168.10	-72.9	20.3	375.2	368.2	6.95	53.969		
2,000.0	1,948.2	1,983.5	1,978.4	8.1	3.8	-167.79	-81.3	13.9	396.1	388.7	7.38	53.676		
2,100.0	2,044.1	2,081.2	2,075.6	8.7	4.1	-167.50	-89.7	7.6	417.1	409.3	7.81	53.398		
2,200.0	2,140.0	2,179.0	2,172.8	9.2	4.3	-167.25	-98.1	1.3	438.1	429.8	8.25	53.133		
2,300.0	2,235.8	2,276.7	2,270.0	9.8	4.6	-167.01	-106.5	-5.1	459.1	450.4	8.68	52.882		
2,400.0	2,331.7	2,374.5	2,367.2	10.3	4.8	-166.80	-114.9	-11.4	480.1	471.0	9.12	52.645		
2,500.0	2,427.5	2,472.2	2,464.4	10.8	5.1	-166.61	-123.3	-17.8	501.1	491.5	9.56	52.420		
2,600.0	2,523.4	2,570.0	2,561.6	11.4	5.3	-166.43	-131.7	-24.1	522.1	512.1	10.00	52.208		
2,700.0	2,619.2	2,667.7	2,658.8	11.9	5.5	-166.26	-140.1	-30.5	543.1	532.7	10.44	52.008		
2,800.0	2,715.1	2,765.5	2,755.9	12.5	5.8	-166.11	-148.5	-36.8	564.1	553.2	10.89	51.818		
2,900.0	2,810.9	2,863.3	2,853.1	13.0	6.0	-165.97	-156.9	-43.1	585.2	573.8	11.33	51.639		
3,000.0	2,906.8	2,961.0	2,950.3	13.5	6.3	-165.83	-165.3	-49.5	606.2	594.4	11.78	51.470		
3,100.0	3,002.7	3,058.8	3,047.5	14.1	6.5	-165.71	-173.7	-55.8	627.2	615.0	12.22	51.309		
3,200.0	3,098.5	3,156.5	3,144.7	14.6	6.8	-165.60	-182.1	-62.2	648.3	635.6	12.67	51.156		
3,300.0	3,194.4	3,254.3	3,241.9	15.2	7.0	-165.49	-190.5	-68.5	669.3	656.2	13.12	51.012		
3,400.0	3,290.2	3,352.0	3,339.1	15.7	7.3	-165.39	-198.9	-74.8	690.3	676.8	13.57	50.874		
3,500.0	3,386.1	3,449.8	3,436.2	16.3	7.5	-165.29	-207.3	-81.2	711.4	697.3	14.02	50.744		
3,600.0	3,481.9	3,547.5	3,533.4	16.8	7.8	-165.20	-215.7	-87.5	732.4	717.9	14.47	50.620		
3,700.0	3,577.8	3,645.3	3,630.6	17.4	8.0	-165.12	-224.2	-93.9	753.4	738.5	14.92	50.501		
3,800.0	3,673.6	3,743.1	3,727.8	17.9	8.2	-165.04	-232.6	-100.2	774.5	759.1	15.37	50.388		
3,900.0	3,769.5	3,840.8	3,825.0	18.4	8.5	-164.96	-241.0	-106.6	795.5	779.7	15.82	50.281		
4,000.0	3,865.4	3,938.6	3,922.2	19.0	8.7	-164.89	-249.4	-112.9	816.6	800.3	16.27	50.178		
4,100.0	3,961.2	4,036.3	4,019.4	19.5	9.0	-164.82	-257.8	-119.2	837.6	820.9	16.73	50.080		
4,200.0	4,057.1	4,134.1	4,116.5	20.1	9.2	-164.75	-266.2	-125.6	858.7	841.5	17.18	49.986		
4,300.0	4,152.9	4,231.8	4,213.7	20.6	9.5	-164.69	-274.6	-131.9	879.7	862.1	17.63	49.896		
4,400.0	4,248.8	4,329.6	4,310.9	21.2	9.7	-164.63	-283.0	-138.3	900.8	882.7	18.08	49.809		
4,500.0	4,344.6	4,427.3	4,408.1	21.7	10.0	-164.58	-291.4	-144.6	921.8	903.3	18.54	49.727		
4,600.0	4,440.5	4,525.1	4,505.3	22.2	10.2	-164.52	-299.8	-150.9	942.9	923.9	18.99	49.647		
4,700.0	4,536.3	4,622.8	4,602.5	22.8	10.5	-164.47	-308.2	-157.3	963.9	944.5	19.45	49.571		
4,800.0	4,632.2	4,720.6	4,699.7	23.3	10.7	-164.42	-316.6	-163.6	985.0	965.1	19.90	49.498		
4,900.0	4,728.1	4,818.4	4,796.9	23.9	11.0	-164.38	-325.0	-170.0	1,006.0	985.7	20.35	49.427		
5,000.0	4,823.9	4,916.1	4,894.0	24.4	11.2	-164.33	-333.4	-176.3	1,027.1	1,006.3	20.81	49.359		
5,100.0	4,919.8	5,013.9	4,991.2	25.0	11.5	-164.29	-341.8	-182.7	1,048.2	1,026.9	21.26	49.294		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design										S26-T2N-R68W (Sullivan) - Sullivan 4H-26H-P268 - HZ - Plan #1				Offset Site Error:		0.0 ft	
Survey Program:										0-Geolink MWD				Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor					
5,200.0	5,015.6	5,111.6	5,088.4	25.5	11.7	-164.24	-350.2	-189.0	1,069.2	1,047.5	21.72	49.231					
5,300.0	5,111.5	5,209.4	5,185.6	26.1	12.0	-164.20	-358.6	-195.3	1,090.3	1,068.1	22.17	49.170					
5,400.0	5,207.3	5,307.1	5,282.8	26.6	12.2	-164.17	-367.0	-201.7	1,111.3	1,088.7	22.63	49.111					
5,500.0	5,303.2	5,404.9	5,380.0	27.1	12.5	-164.13	-375.4	-208.0	1,132.4	1,109.3	23.08	49.055					
5,600.0	5,399.1	5,502.6	5,477.2	27.7	12.7	-164.09	-383.9	-214.4	1,153.4	1,129.9	23.54	49.000					
5,700.0	5,494.9	5,600.4	5,574.3	28.2	13.0	-164.06	-392.3	-220.7	1,174.5	1,150.5	24.00	48.947					
5,800.0	5,590.8	5,698.2	5,671.5	28.8	13.2	-164.02	-400.7	-227.1	1,195.6	1,171.1	24.45	48.896					
5,900.0	5,686.6	5,795.9	5,768.7	29.3	13.5	-163.99	-409.1	-233.4	1,216.6	1,191.7	24.91	48.847					
6,000.0	5,782.5	5,893.7	5,865.9	29.9	13.7	-163.96	-417.5	-239.7	1,237.7	1,212.3	25.36	48.799					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4I-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	2.0	2.0	0.0	0.0	90.28	-0.4	80.0	80.0					
100.0	100.0	102.0	102.0	0.1	0.1	90.28	-0.4	80.0	80.0	79.8	0.24	332.162		
200.0	200.0	202.0	202.0	0.3	0.3	90.28	-0.4	80.0	80.0	79.4	0.59	135.616	CC, ES	
300.0	300.0	302.0	302.0	0.5	0.5	-163.90	-0.4	80.0	81.7	80.7	0.94	86.989		
400.0	399.8	401.8	401.8	0.7	0.6	-164.84	-0.4	80.0	86.7	85.4	1.29	67.327		
500.0	499.5	501.5	501.5	0.9	0.8	-166.17	-0.4	80.0	95.2	93.5	1.64	58.141		
600.0	598.7	600.7	600.7	1.2	1.0	-167.68	-0.4	80.0	107.0	105.1	1.98	53.954		
700.0	697.5	699.5	699.5	1.5	1.2	-169.18	-0.4	80.0	122.4	120.0	2.33	52.564		
800.0	795.6	797.6	797.6	1.9	1.3	-170.57	-0.4	80.0	141.2	138.5	2.67	52.912		
900.0	893.1	895.1	895.1	2.3	1.5	-171.80	-0.4	80.0	163.4	160.4	3.00	54.420		
1,000.0	898.6	891.6	891.6	2.8	1.7	-172.85	-0.4	80.0	189.1	185.7	3.33	56.750		
1,100.0	1,085.5	1,091.8	1,091.8	3.3	1.9	-173.48	-1.7	79.3	216.4	212.7	3.68	58.835		
1,200.0	1,181.4	1,193.4	1,193.3	3.8	2.0	-173.30	-6.2	77.0	241.8	237.8	4.04	59.819		
1,300.0	1,277.2	1,296.0	1,295.5	4.4	2.2	-172.52	-13.9	72.9	265.1	260.7	4.43	59.891		
1,400.0	1,373.1	1,393.4	1,392.3	4.9	2.4	-171.61	-22.8	68.3	287.5	282.7	4.82	59.680		
1,500.0	1,469.0	1,490.7	1,489.2	5.4	2.6	-170.84	-31.6	63.6	309.9	304.7	5.22	59.402		
1,600.0	1,564.8	1,588.1	1,586.0	6.0	2.9	-170.17	-40.5	59.0	332.4	326.8	5.63	59.086		
1,700.0	1,660.7	1,685.5	1,682.9	6.5	3.1	-169.59	-49.3	54.4	354.9	348.9	6.04	58.749		
1,800.0	1,756.5	1,782.9	1,779.8	7.0	3.3	-169.07	-58.2	49.8	377.5	371.0	6.46	58.407		
1,900.0	1,852.4	1,880.2	1,876.6	7.6	3.5	-168.62	-67.0	45.1	400.0	393.2	6.89	58.067		
2,000.0	1,948.2	1,977.6	1,973.5	8.1	3.7	-168.21	-75.8	40.5	422.6	415.3	7.32	57.735		
2,100.0	2,044.1	2,075.0	2,070.3	8.7	4.0	-167.84	-84.7	35.9	445.2	437.5	7.76	57.414		
2,200.0	2,140.0	2,172.4	2,167.2	9.2	4.2	-167.51	-93.5	31.2	467.9	459.7	8.19	57.106		
2,300.0	2,235.8	2,269.7	2,264.1	9.8	4.4	-167.21	-102.4	26.6	490.5	481.9	8.63	56.812		
2,400.0	2,331.7	2,367.1	2,360.9	10.3	4.7	-166.94	-111.2	22.0	513.2	504.1	9.08	56.532		
2,500.0	2,427.5	2,464.5	2,457.8	10.8	4.9	-166.69	-120.1	17.3	535.8	526.3	9.52	56.266		
2,600.0	2,523.4	2,561.8	2,554.6	11.4	5.1	-166.46	-128.9	12.7	558.5	548.5	9.97	56.014		
2,700.0	2,619.2	2,659.2	2,651.5	11.9	5.4	-166.25	-137.8	8.1	581.2	570.8	10.42	55.775		
2,800.0	2,715.1	2,756.6	2,748.4	12.5	5.6	-166.05	-146.6	3.4	603.9	593.0	10.87	55.548		
2,900.0	2,810.9	2,854.0	2,845.2	13.0	5.8	-165.87	-155.5	-1.2	626.6	615.2	11.32	55.334		
3,000.0	2,906.8	2,951.3	2,942.1	13.5	6.1	-165.70	-164.3	-5.8	649.3	637.5	11.78	55.130		
3,100.0	3,002.7	3,048.7	3,038.9	14.1	6.3	-165.54	-173.1	-10.5	672.0	659.7	12.23	54.937		
3,200.0	3,098.5	3,146.1	3,135.8	14.6	6.6	-165.39	-182.0	-15.1	694.7	682.0	12.69	54.754		
3,300.0	3,194.4	3,243.4	3,232.7	15.2	6.8	-165.26	-190.8	-19.7	717.4	704.2	13.14	54.581		
3,400.0	3,290.2	3,340.8	3,329.5	15.7	7.0	-165.13	-199.7	-24.4	740.1	726.5	13.60	54.415		
3,500.0	3,386.1	3,438.2	3,426.4	16.3	7.3	-165.00	-208.5	-29.0	762.8	748.8	14.06	54.258		
3,600.0	3,481.9	3,535.6	3,523.2	16.8	7.5	-164.89	-217.4	-33.6	785.5	771.0	14.52	54.109		
3,700.0	3,577.8	3,632.9	3,620.1	17.4	7.8	-164.78	-226.2	-38.3	808.3	793.3	14.98	53.966		
3,800.0	3,673.6	3,730.3	3,716.9	17.9	8.0	-164.68	-235.1	-42.9	831.0	815.6	15.44	53.830		
3,900.0	3,769.5	3,827.7	3,813.8	18.4	8.2	-164.58	-243.9	-47.5	853.7	837.8	15.90	53.701		
4,000.0	3,865.4	3,925.1	3,910.7	19.0	8.5	-164.49	-252.8	-52.2	876.5	860.1	16.36	53.577		
4,100.0	3,961.2	4,022.4	4,007.5	19.5	8.7	-164.40	-261.6	-56.8	899.2	882.4	16.82	53.459		
4,200.0	4,057.1	4,119.8	4,104.4	20.1	9.0	-164.32	-270.5	-61.4	921.9	904.6	17.28	53.345		
4,300.0	4,152.9	4,217.2	4,201.2	20.6	9.2	-164.24	-279.3	-66.1	944.7	926.9	17.74	53.237		
4,400.0	4,248.8	4,314.5	4,298.1	21.2	9.4	-164.16	-288.1	-70.7	967.4	949.2	18.21	53.133		
4,500.0	4,344.6	4,411.9	4,395.0	21.7	9.7	-164.09	-297.0	-75.3	990.1	971.5	18.67	53.034		
4,600.0	4,440.5	4,509.3	4,491.8	22.2	9.9	-164.02	-305.8	-80.0	1,012.9	993.8	19.13	52.938		
4,700.0	4,536.3	4,606.7	4,588.7	22.8	10.2	-163.96	-314.7	-84.6	1,035.6	1,016.0	19.60	52.846		
4,800.0	4,632.2	4,704.0	4,685.5	23.3	10.4	-163.89	-323.5	-89.2	1,058.4	1,038.3	20.06	52.758		
4,900.0	4,728.1	4,801.4	4,782.4	23.9	10.6	-163.83	-332.4	-93.9	1,081.1	1,060.6	20.53	52.673		
5,000.0	4,823.9	4,898.8	4,879.3	24.4	10.9	-163.78	-341.2	-98.5	1,103.9	1,082.9	20.99	52.592		
5,100.0	4,919.8	4,996.2	4,976.1	25.0	11.1	-163.72	-350.1	-103.1	1,126.6	1,105.2	21.45	52.513		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4I-26H-P268 - HZ - Plan #1													Offset Site Error: 0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,015.6	5,093.5	5,073.0	25.5	11.4	-163.67	-358.9	-107.8	1,149.4	1,127.5	21.92	52.438	
5,300.0	5,111.5	5,190.9	5,169.8	26.1	11.6	-163.62	-367.8	-112.4	1,172.1	1,149.7	22.38	52.365	
5,400.0	5,207.3	5,288.3	5,266.7	26.6	11.9	-163.57	-376.6	-117.0	1,194.9	1,172.0	22.85	52.294	
5,500.0	5,303.2	5,385.6	5,363.6	27.1	12.1	-163.52	-385.5	-121.7	1,217.6	1,194.3	23.31	52.226	
5,600.0	5,399.1	5,483.0	5,460.4	27.7	12.3	-163.47	-394.3	-126.3	1,240.4	1,216.6	23.78	52.161 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4J-26H-P268 - HZ - Plan #1														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	1.0	1.0	0.0	0.0	90.25	-0.4	90.1	90.1						
100.0	100.0	101.0	101.0	0.1	0.1	90.25	-0.4	90.1	90.1	89.8	0.24	376.701			
200.0	200.0	201.0	201.0	0.3	0.3	90.25	-0.4	90.1	90.1	89.5	0.59	153.140 CC, ES			
300.0	300.0	301.0	301.0	0.5	0.5	-163.89	-0.4	90.1	91.7	90.8	0.94	97.896			
400.0	399.8	400.8	400.8	0.7	0.6	-164.72	-0.4	90.1	96.8	95.5	1.29	75.244			
500.0	499.5	500.5	500.5	0.9	0.8	-165.93	-0.4	90.1	105.2	103.6	1.64	64.350			
600.0	598.7	599.7	599.7	1.2	1.0	-167.33	-0.4	90.1	117.1	115.1	1.98	59.055			
700.0	697.5	698.5	698.5	1.5	1.2	-168.75	-0.4	90.1	132.4	130.1	2.33	56.888			
800.0	795.6	796.6	796.6	1.9	1.3	-170.10	-0.4	90.1	151.2	148.5	2.67	56.660 SF			
900.0	893.1	894.1	894.1	2.3	1.5	-171.31	-0.4	90.1	173.4	170.4	3.00	57.726			
1,000.0	989.6	990.6	990.6	2.8	1.7	-172.36	-0.4	90.1	199.0	195.7	3.33	59.706			
1,100.0	1,085.5	1,086.5	1,086.5	3.3	1.8	-173.29	-0.4	90.1	227.2	223.5	3.67	61.900			
1,200.0	1,181.4	1,182.4	1,182.4	3.8	2.0	-173.76	-1.6	90.3	255.5	251.5	4.01	63.654			
1,300.0	1,277.2	1,278.3	1,278.2	4.4	2.2	-173.47	-5.9	91.0	283.8	279.4	4.37	64.954			
1,400.0	1,373.1	1,374.1	1,373.7	4.9	2.4	-172.62	-13.3	92.3	312.2	307.4	4.74	65.814			
1,500.0	1,469.0	1,469.8	1,469.0	5.4	2.6	-171.68	-22.0	93.9	340.6	335.5	5.13	66.351			
1,600.0	1,564.8	1,565.5	1,564.3	6.0	2.7	-170.88	-30.7	95.4	369.2	363.6	5.53	66.717			
1,700.0	1,660.7	1,661.3	1,659.6	6.5	2.9	-170.20	-39.4	96.9	397.7	391.8	5.94	66.954			
1,800.0	1,756.5	1,757.0	1,754.9	7.0	3.1	-169.61	-48.2	98.5	426.4	420.0	6.35	67.099			
1,900.0	1,852.4	1,852.7	1,850.3	7.6	3.4	-169.10	-56.9	100.0	455.0	448.2	6.77	67.178			
2,000.0	1,948.2	1,948.4	1,945.6	8.1	3.6	-168.64	-65.6	101.5	483.7	476.5	7.20	67.210			
2,100.0	2,044.1	2,044.2	2,040.9	8.7	3.8	-168.24	-74.3	103.1	512.4	504.8	7.62	67.208			
2,200.0	2,140.0	2,139.9	2,136.2	9.2	4.0	-167.88	-83.0	104.6	541.2	533.1	8.06	67.182			
2,300.0	2,235.8	2,235.6	2,231.5	9.8	4.2	-167.55	-91.7	106.1	569.9	561.4	8.49	67.139			
2,400.0	2,331.7	2,331.4	2,326.8	10.3	4.4	-167.26	-100.5	107.7	598.7	589.8	8.92	67.084			
2,500.0	2,427.5	2,427.1	2,422.2	10.8	4.6	-166.99	-109.2	109.2	627.5	618.1	9.36	67.021			
2,600.0	2,523.4	2,522.8	2,517.5	11.4	4.9	-166.75	-117.9	110.7	656.3	646.5	9.80	66.952			
2,700.0	2,619.2	2,618.6	2,612.8	11.9	5.1	-166.53	-126.6	112.3	685.1	674.8	10.24	66.879			
2,800.0	2,715.1	2,714.3	2,708.1	12.5	5.3	-166.32	-135.3	113.8	713.9	703.2	10.69	66.805			
2,900.0	2,810.9	2,810.0	2,803.4	13.0	5.5	-166.13	-144.1	115.3	742.7	731.6	11.13	66.731			
3,000.0	2,906.8	2,905.7	2,898.8	13.5	5.7	-165.96	-152.8	116.8	771.5	760.0	11.57	66.656			
3,100.0	3,002.7	3,001.5	2,994.1	14.1	6.0	-165.80	-161.5	118.4	800.4	788.3	12.02	66.582			
3,200.0	3,098.5	3,097.2	3,089.4	14.6	6.2	-165.64	-170.2	119.9	829.2	816.7	12.47	66.509			
3,300.0	3,194.4	3,192.9	3,184.7	15.2	6.4	-165.50	-178.9	121.4	858.1	845.1	12.92	66.437			
3,400.0	3,290.2	3,288.7	3,280.0	15.7	6.6	-165.37	-187.6	123.0	886.9	873.5	13.36	66.367			
3,500.0	3,386.1	3,384.4	3,375.4	16.3	6.8	-165.25	-196.4	124.5	915.8	901.9	13.81	66.299			
3,600.0	3,481.9	3,480.1	3,470.7	16.8	7.1	-165.13	-205.1	126.0	944.6	930.3	14.26	66.232			
3,700.0	3,577.8	3,575.8	3,566.0	17.4	7.3	-165.02	-213.8	127.6	973.5	958.8	14.71	66.168			
3,800.0	3,673.6	3,671.6	3,661.3	17.9	7.5	-164.92	-222.5	129.1	1,002.3	987.2	15.16	66.106			
3,900.0	3,769.5	3,767.3	3,756.6	18.4	7.7	-164.82	-231.2	130.6	1,031.2	1,015.6	15.61	66.045			
4,000.0	3,865.4	3,863.0	3,852.0	19.0	8.0	-164.73	-239.9	132.2	1,060.1	1,044.0	16.06	65.986			
4,100.0	3,961.2	3,958.8	3,947.3	19.5	8.2	-164.65	-248.7	133.7	1,088.9	1,072.4	16.52	65.930			
4,200.0	4,057.1	4,054.5	4,042.6	20.1	8.4	-164.56	-257.4	135.2	1,117.8	1,100.8	16.97	65.875			
4,300.0	4,152.9	4,150.2	4,137.9	20.6	8.6	-164.49	-266.1	136.8	1,146.7	1,129.3	17.42	65.822			
4,400.0	4,248.8	4,245.9	4,233.2	21.2	8.9	-164.41	-274.8	138.3	1,175.6	1,157.7	17.87	65.770			
4,500.0	4,344.6	4,341.7	4,328.5	21.7	9.1	-164.34	-283.5	139.8	1,204.4	1,186.1	18.33	65.720			
4,600.0	4,440.5	4,437.4	4,423.9	22.2	9.3	-164.27	-292.3	141.4	1,233.3	1,214.5	18.78	65.672			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4K-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
0.0	0.0	1.0	1.0	0.0	0.0	90.23	-0.4	100.1	100.1					
100.0	100.0	101.0	101.0	0.1	0.1	90.23	-0.4	100.1	100.1	99.9	0.24	418.816		
200.0	200.0	201.0	201.0	0.3	0.3	90.23	-0.4	100.1	100.1	99.6	0.59	170.261	CC, ES	
300.0	300.0	301.0	301.0	0.5	0.5	-163.88	-0.4	100.1	101.8	100.9	0.94	108.641		
400.0	399.8	400.8	400.8	0.7	0.6	-164.63	-0.4	100.1	106.9	105.6	1.29	83.071		
500.0	499.5	500.5	500.5	0.9	0.8	-165.74	-0.4	100.1	115.3	113.6	1.64	70.499		
600.0	598.7	599.7	599.7	1.2	1.0	-167.04	-0.4	100.1	127.1	125.2	1.98	64.111		
700.0	697.5	698.5	698.5	1.5	1.2	-168.39	-0.4	100.1	142.4	140.1	2.33	61.175		
800.0	795.6	796.6	796.6	1.9	1.3	-169.68	-0.4	100.1	161.2	158.5	2.67	60.375	SF	
900.0	893.1	894.1	894.1	2.3	1.5	-170.87	-0.4	100.1	183.4	180.4	3.01	61.002		
1,000.0	989.6	990.6	990.6	2.8	1.7	-171.92	-0.4	100.1	209.0	205.6	3.34	62.635		
1,100.0	1,085.5	1,085.1	1,085.1	3.3	1.8	-172.54	-1.6	100.6	237.4	233.7	3.67	64.593		
1,200.0	1,181.4	1,179.0	1,178.9	3.8	2.0	-172.37	-5.6	102.1	266.6	262.5	4.03	66.172		
1,300.0	1,277.2	1,272.5	1,272.0	4.4	2.2	-171.63	-12.5	104.8	296.4	292.0	4.40	67.398		
1,400.0	1,373.1	1,367.7	1,366.8	4.9	2.4	-170.75	-20.8	108.0	326.7	321.9	4.79	68.230		
1,500.0	1,469.0	1,462.9	1,461.6	5.4	2.6	-170.02	-29.1	111.2	357.0	351.8	5.19	68.837		
1,600.0	1,564.8	1,558.1	1,556.4	6.0	2.8	-169.41	-37.5	114.4	387.3	381.7	5.59	69.276		
1,700.0	1,660.7	1,653.3	1,651.2	6.5	3.0	-168.89	-45.8	117.6	417.7	411.7	6.00	69.594		
1,800.0	1,756.5	1,748.5	1,746.0	7.0	3.2	-168.43	-54.1	120.8	448.1	441.7	6.42	69.824		
1,900.0	1,852.4	1,843.7	1,840.8	7.6	3.4	-168.04	-62.5	124.0	478.6	471.7	6.84	69.989		
2,000.0	1,948.2	1,938.9	1,935.6	8.1	3.6	-167.69	-70.8	127.2	509.0	501.7	7.26	70.105		
2,100.0	2,044.1	2,034.1	2,030.4	8.7	3.8	-167.38	-79.1	130.4	539.5	531.8	7.69	70.186		
2,200.0	2,140.0	2,129.3	2,125.1	9.2	4.0	-167.10	-87.4	133.6	570.0	561.8	8.11	70.239		
2,300.0	2,235.8	2,224.5	2,219.9	9.8	4.3	-166.86	-95.8	136.8	600.4	591.9	8.54	70.272		
2,400.0	2,331.7	2,319.7	2,314.7	10.3	4.5	-166.63	-104.1	140.0	630.9	622.0	8.98	70.290		
2,500.0	2,427.5	2,415.0	2,409.5	10.8	4.7	-166.43	-112.4	143.2	661.4	652.0	9.41	70.296		
2,600.0	2,523.4	2,510.2	2,504.3	11.4	4.9	-166.24	-120.7	146.4	692.0	682.1	9.84	70.292		
2,700.0	2,619.2	2,605.4	2,599.1	11.9	5.1	-166.07	-129.1	149.6	722.5	712.2	10.28	70.282		
2,800.0	2,715.1	2,700.6	2,693.9	12.5	5.4	-165.92	-137.4	152.8	753.0	742.3	10.72	70.267		
2,900.0	2,810.9	2,795.8	2,788.7	13.0	5.6	-165.77	-145.7	156.0	783.5	772.4	11.15	70.247		
3,000.0	2,906.8	2,891.0	2,883.5	13.5	5.8	-165.64	-154.1	159.2	814.1	802.5	11.59	70.225		
3,100.0	3,002.7	2,986.2	2,978.2	14.1	6.0	-165.52	-162.4	162.4	844.6	832.6	12.03	70.200		
3,200.0	3,098.5	3,081.4	3,073.0	14.6	6.2	-165.40	-170.7	165.6	875.2	862.7	12.47	70.175		
3,300.0	3,194.4	3,176.6	3,167.8	15.2	6.5	-165.29	-179.0	168.8	905.7	892.8	12.91	70.148		
3,400.0	3,290.2	3,271.8	3,262.6	15.7	6.7	-165.19	-187.4	172.0	936.2	922.9	13.35	70.120		
3,500.0	3,386.1	3,367.0	3,357.4	16.3	6.9	-165.10	-195.7	175.2	966.8	953.0	13.79	70.092		
3,600.0	3,481.9	3,462.2	3,452.2	16.8	7.1	-165.01	-204.0	178.4	997.3	983.1	14.23	70.064		
3,700.0	3,577.8	3,557.4	3,547.0	17.4	7.4	-164.93	-212.4	181.6	1,027.9	1,013.2	14.68	70.035		
3,800.0	3,673.6	3,652.7	3,641.8	17.9	7.6	-164.85	-220.7	184.8	1,058.5	1,043.3	15.12	70.007		
3,900.0	3,769.5	3,747.9	3,736.6	18.4	7.8	-164.78	-229.0	188.0	1,089.0	1,073.4	15.56	69.980		
4,000.0	3,865.4	3,843.1	3,831.3	19.0	8.0	-164.71	-237.3	191.2	1,119.6	1,103.6	16.00	69.952		
4,100.0	3,961.2	3,938.3	3,926.1	19.5	8.3	-164.64	-245.7	194.4	1,150.1	1,133.7	16.45	69.925		
4,200.0	4,057.1	4,033.5	4,020.9	20.1	8.5	-164.58	-254.0	197.6	1,180.7	1,163.8	16.89	69.899		
4,300.0	4,152.9	4,128.7	4,115.7	20.6	8.7	-164.52	-262.3	200.8	1,211.3	1,193.9	17.34	69.873		
4,400.0	4,248.8	4,223.9	4,210.5	21.2	8.9	-164.46	-270.6	204.0	1,241.8	1,224.0	17.78	69.848		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4L-26H-P268 - HZ - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	90.38	-0.7	109.9	109.9					
100.0	100.0	101.0	101.0	0.1	0.1	90.38	-0.7	109.9	109.9	109.7	0.24	459.768		
200.0	200.0	201.0	201.0	0.3	0.3	90.38	-0.7	109.9	109.9	109.3	0.59	186.909	CC, ES	
300.0	300.0	301.0	301.0	0.5	0.5	-163.71	-0.7	109.9	111.6	110.7	0.94	119.087		
400.0	399.8	400.8	400.8	0.7	0.6	-164.41	-0.7	109.9	116.6	115.4	1.29	90.674		
500.0	499.5	500.5	500.5	0.9	0.8	-165.44	-0.7	109.9	125.1	123.4	1.64	76.466		
600.0	598.7	599.7	599.7	1.2	1.0	-166.66	-0.7	109.9	136.9	134.9	1.98	69.012		
700.0	697.5	698.5	698.5	1.5	1.2	-167.96	-0.7	109.9	152.2	149.8	2.33	65.324		
800.0	795.6	796.6	796.6	1.9	1.3	-169.22	-0.7	109.9	170.9	168.2	2.67	63.967	SF	
900.0	893.1	894.1	894.1	2.3	1.5	-170.39	-0.7	109.9	193.0	190.0	3.01	64.164		
1,000.0	989.6	990.6	990.6	2.8	1.7	-171.45	-0.7	109.9	218.6	215.3	3.34	65.456		
1,100.0	1,085.5	1,082.5	1,082.5	3.3	1.8	-172.13	-1.6	110.7	247.4	243.8	3.67	67.346		
1,200.0	1,181.4	1,172.9	1,172.8	3.8	2.0	-172.18	-4.5	113.5	278.1	274.1	4.02	69.218		
1,300.0	1,277.2	1,262.3	1,261.9	4.4	2.2	-171.76	-9.5	118.2	310.5	306.1	4.37	71.008		
1,400.0	1,373.1	1,350.4	1,349.5	4.9	2.3	-171.03	-16.3	124.6	344.6	339.8	4.74	72.681		
1,500.0	1,469.0	1,443.1	1,441.5	5.4	2.6	-170.17	-24.7	132.6	379.7	374.6	5.14	73.948		
1,600.0	1,564.8	1,536.6	1,534.2	6.0	2.8	-169.45	-33.3	140.7	415.0	409.5	5.54	74.923		
1,700.0	1,660.7	1,630.0	1,626.9	6.5	3.0	-168.84	-41.8	148.7	450.3	444.4	5.95	75.689		
1,800.0	1,756.5	1,723.5	1,719.7	7.0	3.2	-168.32	-50.3	156.8	485.6	479.3	6.36	76.299		
1,900.0	1,852.4	1,817.0	1,812.4	7.6	3.5	-167.87	-58.9	164.8	521.0	514.2	6.78	76.791		
2,000.0	1,948.2	1,910.4	1,905.1	8.1	3.7	-167.48	-67.4	172.9	556.4	549.2	7.21	77.192		
2,100.0	2,044.1	2,003.9	1,997.8	8.7	3.9	-167.13	-75.9	180.9	591.8	584.2	7.63	77.522		
2,200.0	2,140.0	2,097.3	2,090.6	9.2	4.2	-166.82	-84.5	189.0	627.3	619.2	8.06	77.797		
2,300.0	2,235.8	2,190.8	2,183.3	9.8	4.4	-166.55	-93.0	197.1	662.7	654.2	8.49	78.026		
2,400.0	2,331.7	2,284.3	2,276.0	10.3	4.7	-166.30	-101.5	205.1	698.2	689.2	8.93	78.221		
2,500.0	2,427.5	2,377.7	2,368.7	10.8	4.9	-166.08	-110.1	213.2	733.6	724.3	9.36	78.386		
2,600.0	2,523.4	2,471.2	2,461.4	11.4	5.2	-165.88	-118.6	221.2	769.1	759.3	9.79	78.528		
2,700.0	2,619.2	2,564.7	2,554.2	11.9	5.4	-165.69	-127.1	229.3	804.6	794.4	10.23	78.650		
2,800.0	2,715.1	2,658.1	2,646.9	12.5	5.7	-165.52	-135.7	237.3	840.1	829.4	10.67	78.756		
2,900.0	2,810.9	2,751.6	2,739.6	13.0	5.9	-165.37	-144.2	245.4	875.6	864.5	11.10	78.848		
3,000.0	2,906.8	2,845.0	2,832.3	13.5	6.2	-165.22	-152.7	253.5	911.1	899.6	11.54	78.929		
3,100.0	3,002.7	2,938.5	2,925.1	14.1	6.4	-165.09	-161.3	261.5	946.6	934.6	11.98	79.000		
3,200.0	3,098.5	3,032.0	3,017.8	14.6	6.7	-164.97	-169.8	269.6	982.1	969.7	12.42	79.062		
3,300.0	3,194.4	3,125.4	3,110.5	15.2	7.0	-164.86	-178.3	277.6	1,017.6	1,004.8	12.86	79.118		
3,400.0	3,290.2	3,218.9	3,203.2	15.7	7.2	-164.75	-186.9	285.7	1,053.2	1,039.9	13.30	79.167		
3,500.0	3,386.1	3,312.3	3,295.9	16.3	7.5	-164.65	-195.4	293.7	1,088.7	1,074.9	13.74	79.211		
3,600.0	3,481.9	3,405.8	3,388.7	16.8	7.7	-164.56	-203.9	301.8	1,124.2	1,110.0	14.19	79.251		
3,700.0	3,577.8	3,499.3	3,481.4	17.4	8.0	-164.47	-212.5	309.9	1,159.7	1,145.1	14.63	79.286		
3,800.0	3,673.6	3,592.7	3,574.1	17.9	8.2	-164.39	-221.0	317.9	1,195.3	1,180.2	15.07	79.318		
3,900.0	3,769.5	3,686.2	3,666.8	18.4	8.5	-164.31	-229.5	326.0	1,230.8	1,215.3	15.51	79.346		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 6-8-26 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error: 0.0 ft	
Survey Program: 165-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
1,500.0	1,469.0	1,728.0	1,687.5	5.4	6.7	14.06	-145.3	-1,470.9	1,256.3	1,249.5	6.83	183.882		
1,600.0	1,564.8	1,823.8	1,780.2	6.0	7.2	13.63	-158.6	-1,451.0	1,209.8	1,202.4	7.35	164.588		
1,700.0	1,660.7	1,926.7	1,879.2	6.5	7.7	13.04	-174.7	-1,427.8	1,161.8	1,153.9	7.91	146.920		
1,800.0	1,756.5	2,015.0	1,964.1	7.0	8.2	12.51	-187.8	-1,407.4	1,113.4	1,105.0	8.40	132.490		
1,900.0	1,852.4	2,113.6	2,059.1	7.6	8.7	12.01	-200.3	-1,384.3	1,064.7	1,055.8	8.90	119.690		
2,000.0	1,948.2	2,192.8	2,135.4	8.1	9.1	11.59	-209.9	-1,365.6	1,015.7	1,006.4	9.36	108.507		
2,100.0	2,044.1	2,287.4	2,226.5	8.7	9.6	10.92	-222.9	-1,343.3	967.0	957.1	9.88	97.863		
2,200.0	2,140.0	2,369.6	2,305.5	9.2	10.0	10.34	-233.6	-1,323.6	918.1	907.7	10.35	88.687		
2,300.0	2,235.8	2,457.6	2,390.5	9.8	10.4	9.73	-243.8	-1,303.0	869.4	858.6	10.82	80.339		
2,400.0	2,331.7	2,546.7	2,476.6	10.3	10.9	9.10	-253.3	-1,281.9	820.7	809.4	11.30	72.606		
2,500.0	2,427.5	2,630.3	2,557.3	10.8	11.3	8.43	-262.4	-1,262.2	772.1	760.3	11.77	65.592		
2,600.0	2,523.4	2,708.2	2,632.5	11.4	11.7	7.69	-271.5	-1,244.4	724.3	712.1	12.26	59.084		
2,700.0	2,619.2	2,798.4	2,719.6	11.9	12.1	6.52	-284.0	-1,224.1	677.3	664.5	12.84	52.766		
2,800.0	2,715.1	2,887.5	2,805.4	12.5	12.6	5.18	-296.4	-1,203.5	630.0	616.6	13.43	46.912		
2,900.0	2,810.9	2,973.5	2,888.3	13.0	13.0	3.74	-307.9	-1,183.7	582.9	568.9	14.04	41.509		
3,000.0	2,906.8	3,060.5	2,972.2	13.5	13.4	2.08	-319.2	-1,163.9	536.4	521.7	14.69	36.517		
3,100.0	3,002.7	3,151.0	3,059.6	14.1	13.9	0.13	-330.1	-1,143.2	490.0	474.6	15.43	31.751		
3,200.0	3,098.5	3,239.9	3,145.3	14.6	14.3	-2.23	-341.0	-1,122.3	443.7	427.4	16.27	27.274		
3,300.0	3,194.4	3,320.8	3,223.5	15.2	14.7	-4.75	-350.5	-1,103.8	398.4	381.2	17.19	23.179		
3,400.0	3,290.2	3,415.1	3,314.7	15.7	15.2	-8.45	-362.1	-1,082.5	354.5	336.0	18.47	19.197		
3,500.0	3,386.1	3,507.8	3,404.1	16.3	15.7	-12.83	-371.1	-1,060.1	309.7	289.7	20.05	15.447		
3,600.0	3,481.9	3,595.4	3,488.3	16.8	16.1	-18.49	-379.9	-1,037.7	265.9	243.7	22.14	12.010		
3,700.0	3,577.8	3,682.7	3,572.1	17.4	16.6	-26.21	-388.9	-1,014.7	224.7	199.7	24.93	9.013		
3,800.0	3,673.6	3,760.5	3,647.0	17.9	17.0	-35.17	-397.3	-995.5	190.0	162.0	27.97	6.792		
3,900.0	3,769.5	3,843.1	3,727.0	18.4	17.4	-46.88	-408.1	-977.8	166.7	135.4	31.28	5.329		
4,000.0	3,865.4	3,933.8	3,815.0	19.0	17.7	-61.48	-420.4	-960.2	155.8	121.8	33.97	4.586		
4,060.5	3,923.4	3,991.2	3,871.3	19.3	18.0	-70.73	-426.7	-950.3	154.1	119.3	34.75	4.434	CC, ES, SF	
4,100.0	3,961.2	4,029.2	3,908.6	19.5	18.1	-76.69	-430.2	-944.3	154.7	119.9	34.87	4.437		
4,200.0	4,057.1	4,123.1	4,001.3	20.1	18.4	-90.45	-437.5	-930.8	162.5	128.4	34.02	4.775		
4,300.0	4,152.9	4,218.9	4,096.1	20.6	18.6	-102.34	-443.9	-919.1	177.4	145.3	32.12	5.523		
4,400.0	4,248.8	4,315.3	4,191.9	21.2	18.9	-111.92	-449.4	-909.7	197.0	166.9	30.03	6.559		
4,500.0	4,344.6	4,413.2	4,289.4	21.7	19.1	-119.45	-454.6	-902.6	218.8	190.5	28.25	7.745		
4,600.0	4,440.5	4,510.0	4,385.9	22.2	19.2	-125.51	-459.1	-896.6	242.4	215.5	26.91	9.008		
4,700.0	4,536.3	4,610.5	4,486.2	22.8	19.4	-130.78	-462.2	-891.6	266.3	240.4	25.91	10.280		
4,800.0	4,632.2	4,709.2	4,584.9	23.3	19.5	-135.19	-463.9	-888.2	290.0	264.8	25.27	11.477		
4,900.0	4,728.1	4,806.3	4,681.9	23.9	19.6	-138.91	-465.0	-885.4	314.3	289.4	24.91	12.617		
5,000.0	4,823.9	4,902.9	4,778.5	24.4	19.7	-142.16	-465.4	-883.0	339.1	314.4	24.72	13.718		
5,100.0	4,919.8	4,997.2	4,872.8	25.0	19.8	-145.02	-465.2	-880.6	364.8	340.1	24.64	14.803		
5,200.0	5,015.6	5,091.5	4,967.0	25.5	19.9	-147.61	-464.4	-877.6	391.5	366.8	24.63	15.893		
5,300.0	5,111.5	5,195.0	5,070.5	26.1	20.0	-150.04	-463.6	-875.5	417.9	393.2	24.69	16.929		
5,400.0	5,207.3	5,296.6	5,172.1	26.6	20.1	-152.00	-463.3	-875.5	443.0	418.2	24.82	17.851		
5,500.0	5,303.2	5,392.7	5,268.2	27.1	20.2	-153.68	-462.8	-876.0	468.0	443.0	24.97	18.739		
5,600.0	5,399.1	5,488.9	5,364.4	27.7	20.2	-155.23	-461.9	-876.4	493.4	468.2	25.15	19.620		
5,700.0	5,494.9	5,585.2	5,460.7	28.2	20.3	-156.67	-460.8	-876.9	518.9	493.6	25.33	20.490		
5,800.0	5,590.8	5,676.3	5,551.8	28.8	20.4	-157.89	-459.9	-877.1	545.1	519.5	25.54	21.346		
5,900.0	5,686.6	5,765.3	5,640.7	29.3	20.5	-158.91	-459.7	-876.3	572.5	546.8	25.77	22.219		
6,000.0	5,782.5	5,867.3	5,742.7	29.9	20.5	-159.94	-459.8	-875.1	600.5	574.5	26.00	23.095		
6,100.0	5,878.3	5,972.9	5,848.3	30.4	20.6	-161.01	-458.8	-875.6	627.0	600.7	26.22	23.911		
6,200.0	5,974.2	6,073.1	5,948.5	30.9	20.7	-162.00	-457.1	-877.1	652.6	626.2	26.44	24.684		
6,300.0	6,070.0	6,172.3	6,047.6	31.5	20.7	-162.93	-455.2	-879.1	677.9	651.2	26.66	25.430		
6,400.0	6,165.9	6,269.6	6,145.0	32.0	20.7	-163.81	-452.9	-881.4	703.0	676.1	26.87	26.164		
6,500.0	6,261.8	6,367.0	6,242.3	32.6	20.8	-164.65	-450.2	-883.8	728.2	701.1	27.09	26.883		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 6-8-26 (EXISTING) - ENCANA WELL - SURVEYS												Offset Site Error: 0.0 ft	
Survey Program: 165-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
6,600.0	6,357.6	6,464.5	6,339.7	33.1	20.8	-165.44	-447.6	-886.3	753.3	726.0	27.31	27.586	
6,700.0	6,453.5	6,559.4	6,434.5	33.7	20.9	-166.16	-445.0	-888.9	778.5	751.0	27.53	28.278	
6,800.0	6,549.3	6,653.6	6,528.7	34.2	20.9	-166.83	-442.4	-891.1	804.1	776.4	27.76	28.969	
6,900.0	6,645.2	6,747.2	6,622.2	34.8	21.0	-167.47	-439.7	-893.1	830.1	802.1	27.99	29.658	
7,000.0	6,741.0	6,840.4	6,715.4	35.3	21.0	-168.06	-437.0	-894.8	856.5	828.2	28.22	30.346	
7,100.0	6,836.9	6,932.3	6,807.2	35.8	21.1	-168.60	-434.5	-896.1	883.3	854.8	28.47	31.030	
7,200.0	6,932.8	7,024.8	6,899.6	36.4	21.2	178.03	-432.1	-896.9	910.6	881.9	28.63	31.802	
7,300.0	7,028.6	7,120.6	6,995.4	36.8	21.2	143.39	-429.8	-897.6	936.6	907.8	28.78	32.538	
7,400.0	7,121.9	7,214.3	7,089.1	37.2	21.3	122.14	-427.5	-898.2	960.5	931.5	28.99	33.134	
7,500.0	7,209.8	7,303.0	7,177.8	37.5	21.4	111.21	-425.6	-898.8	982.9	953.7	29.13	33.742	
7,600.0	7,289.6	7,381.9	7,256.6	37.7	21.5	105.43	-424.0	-899.2	1,004.8	975.6	29.18	34.430	
7,700.0	7,358.8	7,446.8	7,321.5	37.8	21.5	101.95	-423.0	-899.3	1,028.1	998.9	29.19	35.216	
7,800.0	7,415.5	7,499.4	7,374.1	37.9	21.6	99.36	-422.5	-899.2	1,054.2	1,025.0	29.20	36.101	
7,900.0	7,457.9	7,538.8	7,413.5	38.0	21.6	96.81	-422.3	-898.9	1,084.3	1,055.0	29.25	37.065	
8,000.0	7,484.6	7,565.1	7,439.8	38.1	21.7	93.83	-422.2	-898.7	1,118.5	1,089.2	29.31	38.164	
8,100.0	7,494.9	7,575.3	7,450.1	38.2	21.7	90.09	-422.2	-898.6	1,156.6	1,127.4	29.21	39.590	
8,200.0	7,495.0	7,575.7	7,450.5	38.3	21.7	89.63	-422.2	-898.6	1,199.5	1,169.9	29.53	40.612	
8,300.0	7,495.0	7,576.0	7,450.8	38.5	21.7	89.64	-422.2	-898.6	1,248.8	1,218.7	30.11	41.470	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4A-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4995.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4995.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4A-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Well @ 4995.0ft

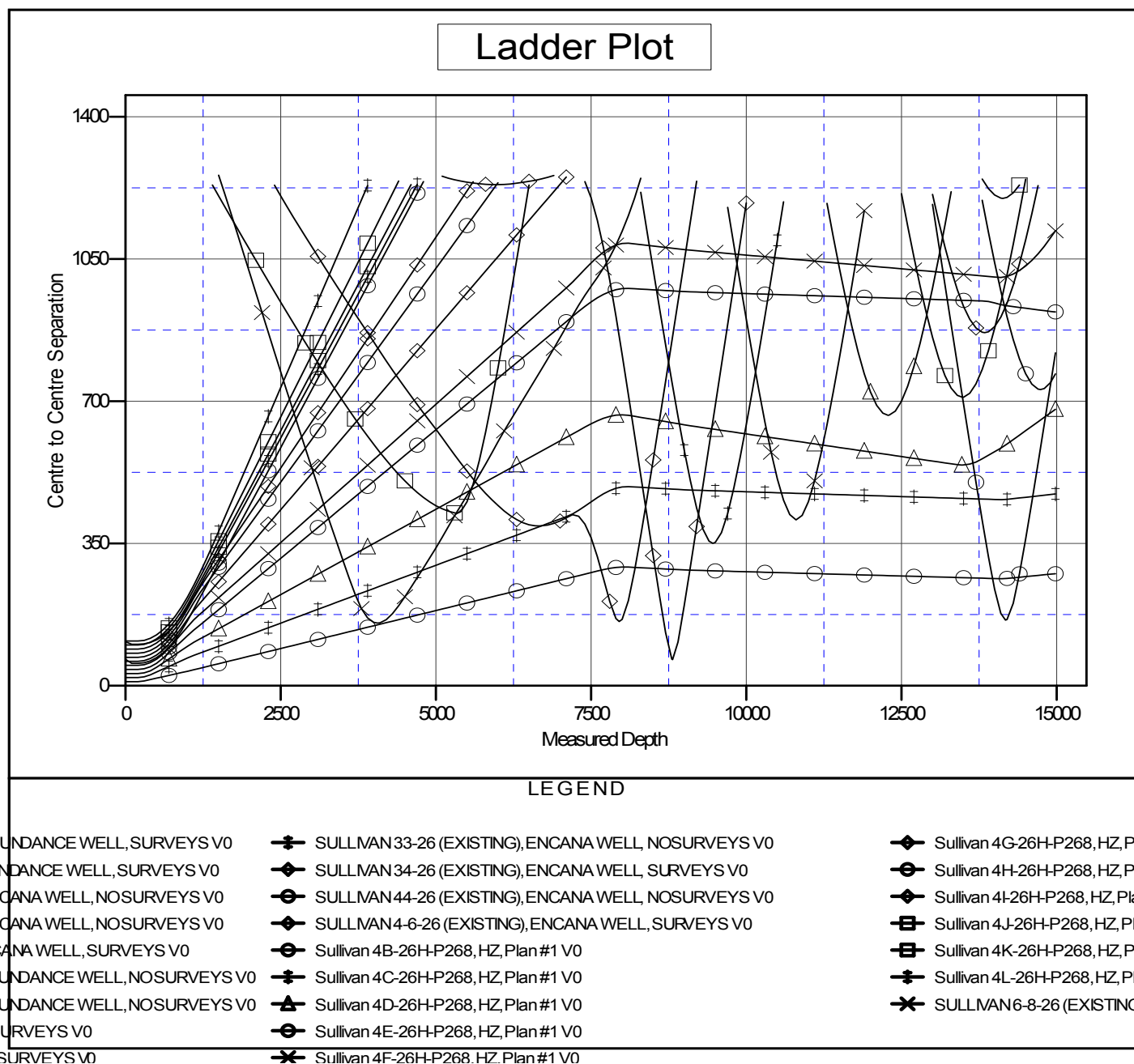
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Sullivan 4A-26H-P268

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.35°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation